

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION

UNITED STATES OF AMERICA,)
)
 Plaintiff,)
)
VS.) CIVIL ACTION
)
GREG ABBOTT IN HIS) NO.: 1:23-cv-00853-DAE
CAPACITY AS GOVERNOR OF)
THE STATE OF TEXAS, AND)
THE STATE OF TEXAS,)
)
 Defendants.)

REMOTE ORAL AND VIDEOTAPED DEPOSITION OF

ADRIAN CORTEZ

MAY 22, 2024

REMOTE ORAL AND VIDEOTAPED DEPOSITION OF ADRIAN
CORTEZ, produced as a witness at the instance of the
DEFENDANT, and duly sworn, was taken in the
above-styled and numbered cause on May 22, 2024, from
9:18 a.m. to 4:40 p.m., before Vanessa J. Theisen,
CSR in and for the State of Texas, who appeared
remotely via Zoom videoconference, and reported by
machine shorthand, at the offices of the U.S.
Attorney General's Office, 700 E. San Antonio. Suite
200, El Paso, Texas 79901, pursuant to the Federal
Rules of Civil Procedure and any provisions stated on
the record or attached hereto.

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APPEARANCES

FOR THE UNITED STATES OF AMERICA:

Mr. Bryan J. Harrison
Trial Attorney

UNITED STATES DEPARTMENT OF JUSTICE
Environment & Natural Resources Division
P.O. Box 7611
Washington, D.C. 20044-7611
(202) 307-0930
Bryan.Harrison@usdoj.gov

FOR GREG ABBOTT IN HIS CAPACITY AS GOVERNOR OF THE
STATE OF TEXAS, AND THE STATE OF TEXAS:

Mr. Johnathan Stone
Ms. Munera Al-Fuhaid
Mr. Kyle Tebo
Special Counsel
Office of the Attorney General
P.O. Box 12548, MC-009
Austin, Texas 78711-2548
(512) 936-2172
Johnathan.Stone@oag.texas.gov
Munera.Al-Fuhaid@oag.texas.gov
Kyle.Tebo@oag.texas.gov

ALSO PRESENT (via Zoom Teleconference):

Ms. Vanessa J. Theisen, CSR, RPR
Mr. David Bryant
Consulting Expert (undisclosed name)
Consulting Expert (undisclosed name)
Consulting Expert (undisclosed name)
Consulting Expert (undisclosed name)
Consulting Expert (undisclosed name)
Ms. Kimere Kimball
Mr. Andrew Knudsen
Mr. Brian Lynk
Ms. Alexia Baker
Ms. Zachary Berg

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THE VIDEOGRAPHER: Today's date is
May 22nd, 2024. This is the video deposition of
Adrian Cortez, in the matter of United States of
America v. Greg Abbott, et al. Our location is 700
E. San Antonio, Suite 200, in El Paso, TX.
We are on the record at 9:18 a.m. My
name is Leo Betancourt, and my business address is
9901 Brodie Lane, Austin, TX 78748.
Would all persons present please
introduce themselves for the record, after which the
officer of the court will administer the oath to the
witness.
MR. STONE: Johnathan Stone on behalf of
the State of Texas. I'm here along with my cocounsel
Munera and Kyle. We're also joined on Zoom by David
Bryant and Alexia Baker as well as several consulting
experts. Oh, and Zach Berg as well.
MR. HARRISON: All right. Good morning.
Brian Harrison, on behalf of the United States, in
person. Remotely, I have my colleagues Brian Lynk
and Andrew Knudsen as well as Kimere Kimball.
THE REPORTER: Okay. Mr. Cortez, I need
to swear you in, please. If you will raise your
right hand.
(Witness sworn.)

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REPORTER'S NOTE

Quotation marks are used for clarity and do not
necessarily reflect a direct quote.

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ADRIAN CORTEZ,

having been first duly sworn, testified as follows:

EXAMINATION

BY MR. STONE:

Q. Good morning, Mr. Cortez.

A. Morning.

Q. Could you state your name for the record?

A. My name is Adrian Dmitri Cortez.

Q. Mr. Cortez, have you ever testified before
in a case?

A. I have not.

Q. Have you ever given a deposition in a case
before?

A. I have not.

Q. Are you currently under the influence of any
medications or drugs that would impair your ability
to testify truthfully today?

A. I am not.

Q. Do you understand today that you are
testifying under oath, and it's the same as if you
were sitting today in a courtroom in Austin, Texas,
in front of the jury?

A. Yes, I understand.

Q. Do you understand that during the course of
the deposition, we'll take breaks probably every --

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| <p>6</p> <p>1 every hour, but if you need to take a break at any 2 point, you can ask? 3 A. Yes. 4 Q. And do you understand that if at any point 5 you do need to take a break, if there is a question 6 that I've asked, you will need to answer the question 7 before we go on break? 8 A. Yes. 9 Q. Do you understand that you need to give oral 10 answers during the course of the deposition so the 11 court reporter can record it? 12 A. Yes. 13 Q. Do you understand that during the course of 14 the deposition, you may hear objections stated, but 15 you'll still need to go ahead and answer the 16 question? 17 A. Yes. 18 Q. During the course of the deposition, I may 19 use the term "IBWC" or "Commission." Do you 20 understand that when I use those terms, I'm referring 21 to the International Boundary and Water Commission? 22 A. That is correct, yes. 23 Q. And, additionally, during the course of the 24 deposition, I may use terms like "Rio Grande River" 25 or "reach." And unless I specify otherwise, do you</p> | <p>8</p> <p>1 A. Yes, it is. 2 Q. I understand that you have a bachelor's in 3 science, right? 4 A. That is correct. 5 Q. What is your bachelor of science degree in? 6 A. Civil engineering. 7 Q. When did you receive a bachelor of science 8 degree in civil engineering? 9 A. I believe it was 2018. 10 Q. 2018? 11 A. Sorry, not 2018. 2008. 12 Q. 2008. I also see that you started a 13 master's degree, a master's of science in 14 environmental engineering? 15 A. That is correct. 16 Q. When did you start your master's of science 17 in environmental engineering? 18 A. Immediately after graduating with my civil 19 bachelor degree. 20 Q. In 2008? 21 A. Yes. 22 Q. How many hours towards your master's of 23 science in environmental engineering did you 24 complete? 25 A. 31 hours were completed.</p> |
| <p>7</p> <p>1 understand that I'm referring specifically to the 2 section between river miles 275.5 and 610? 3 A. Yes. 4 Q. Do you also understand that if any -- at any 5 point during the deposition, if any of my questions 6 are vague or difficult to understand, you can a -- 7 you can let me know and ask for clarification? 8 A. Uh-huh, I do. 9 Q. Well, let's get started. 10 MR. STONE: I'm going to drop what I'm 11 marking as Exhibit 1 in the chat, for the court 12 reporter. 13 (Cortez Exhibit 1 marked.) 14 MR. HARRISON: Do you want to make them 15 Cortez Exhibit 1, just for ease of reference with the 16 other depositions? 17 MR. STONE: Yes, we can do that. 18 MR. HARRISON: Okay. 19 MR. STONE: Let me rename it real quick. 20 Q. (BY MR. STONE) Mr. Cortez, do you see on 21 the screen what -- apologies. 22 Can you see on the screen what we have 23 marked as Cortez Exhibit No. 1? 24 A. Yes, I can. 25 Q. Is this a copy of your CV?</p> | <p>9</p> <p>1 Q. How many did you need to complete a master's 2 degree in civil engineering? 3 A. I believe it was around that number. 4 Q. Did you actually complete a master's of 5 science in environmental engineering? 6 A. No, I did not. 7 Q. Do you hold an engineering license? 8 A. I do not. 9 Q. Are you an engineer? 10 A. I have attained a degree in engineering, but 11 I am not employed as an engineer. 12 Q. Are you licensed to engage in the practice 13 of engineering in any jurisdiction? 14 A. I am not. 15 Q. Are you working -- 16 THE REPORTER: Hang on. Did you say, "I 17 am not"? 18 THE WITNESS: I am not, no. 19 THE REPORTER: Okay. I need you to slow 20 your answers down just a bit. 21 THE WITNESS: Okay. 22 Q. (BY MR. STONE) You are not currently 23 employed as an engineer at the IBWC, are you? 24 A. I am not. 25 Q. And none of your job duties at the</p> |

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|--|--|
| <p>10</p> <p>1 Commission involve the practice of engineering, do 2 they?</p> <p>3 A. No.</p> <p>4 Q. Are you giving any engineering opinions in 5 this case?</p> <p>6 A. No.</p> <p>7 Q. You are a hydrologist, right?</p> <p>8 A. That is correct.</p> <p>9 Q. What is hydrology?</p> <p>10 A. Hydrology? So it would be the study of 11 water resources: Where it comes from, whether it's 12 supply or drought, groundwater as well as surface 13 water, the science of the water of where it comes 14 from, and those sorts of topics.</p> <p>15 Q. What does a hydrologist do?</p> <p>16 A. A hydrologist can perform everything from 17 water resource studies -- in my case, where I'm part 18 of the Water Accounting Division, as my CV notes, it 19 can be statistical analysis of data, modeling -- 20 hydraulic modeling -- sorry, not hydraulic -- 21 hydrologic modeling, things of that nature.</p> <p>22 Q. You said that -- you testified that you 23 worked in the Water Accounting Division, correct?</p> <p>24 A. That is correct.</p> <p>25 Q. What is the Water Accounting Division?</p> | <p>12</p> <p>1 A. Yes.</p> <p>2 Q. Can you describe the review and 3 certification process for the stream flow records at 4 over 80 stream gages?</p> <p>5 A. Okay. So it depends on the record itself 6 and location. So in order to produce a stream flow 7 record, there is a lot of data that is collected; 8 both in the field as well from sensor technology 9 that's metering water levels would be our primary 10 collection data point.</p> <p>11 So the composite of all of that can go 12 into what is a computation of a discharge record. So 13 it would be the review of the flow records, the 14 review of the data that was collected in the field, 15 the review of the stream or the stage rating 16 curves -- so these are curves that are used to relay 17 a water level to a flow -- and the calibrations that 18 are performed using the field data in order to 19 produce a flow record.</p> <p>20 Q. You also mentioned that you provide "input 21 and guidance for management and expansion of agency 22 stream gaging program." Do you see that up on the 23 screen?</p> <p>24 A. I do.</p> <p>25 Q. Okay. How many stream gages have been added</p> |
| <p>11</p> <p>1 A. So it is a division of the International 2 Boundary and Water Commission under the U.S. section 3 in my position that's responsible for implementing 4 certain provisions of the 1944 Water Treaty.</p> <p>5 So there's provisions that require both 6 countries to keep an accurate accounting of the 7 ownership of flows in the river, and it is the -- my 8 division's responsibility to make those 9 determinations.</p> <p>10 Q. So is it accurate to describe you as a water 11 accountant?</p> <p>12 A. That would be part of my job description, 13 yes.</p> <p>14 Q. On page 2 of Cortez Exhibit 1, under 15 Hydrologist Positions and Responsibilities, tell me 16 if I'm reading this accurately, and you should see it 17 on the screen: "Serves as Agency SME for review and 18 certification of agency stream flow records at over 19 80 stream gages." Did I read that accurately?</p> <p>20 A. That is correct, yes.</p> <p>21 Q. What is SME?</p> <p>22 A. That acronym there is subject matter expert.</p> <p>23 Q. When you use "SME" in your CV elsewhere, are 24 you also similarly referring to subject matter 25 expert?</p> | <p>13</p> <p>1 to the stream gaging program as a result of your 2 input and guidance?</p> <p>3 A. I would say under two dozen, but I couldn't 4 give an exact number.</p> <p>5 Q. So prior to beginning at IBWC, there were 6 less than 60 stream gages.</p> <p>7 A. So -- that is not accurate. So we -- so the 8 certification of stream flow gages for the agency, 9 there are only certain gages that we do a flow -- a 10 complete record for those. There are other gages 11 that we operate that we maintain for operational 12 purposes, for flood management and monitoring, which 13 we would not perform the same steps and reviews.</p> <p>14 Q. How many stream gages were in the stream 15 gage program when you first started?</p> <p>16 A. I do not recall.</p> <p>17 Q. But it's your testimony that based on your 18 input, several dozen additional stream gages have 19 been added to the stream gaging program?</p> <p>20 A. So I'm testifying to the fact that, in my 21 recollection, we have added under two dozen 22 additional gages, but that does not imply knowledge 23 of what was before. And, certainly, I have knowledge 24 of it; I just can't recall at this time an exact 25 number.</p> |

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| <p style="text-align: right;">14</p> <p>1 Q. What are stream flow hydraulics?</p> <p>2 A. Can you refer to the section that you're --</p> <p>3 or is that just a general question?</p> <p>4 Q. That's -- it's a general question.</p> <p>5 A. Stream flow hydraulics -- so within a</p> <p>6 cross-section of a river or a reach of a river, the</p> <p>7 area of the actual river, as well as things like the</p> <p>8 slope of the river -- you know, the land -- slope of</p> <p>9 the land surface, as well as what sort of material</p> <p>10 makes up the river, whether it's large gravel, rocks,</p> <p>11 trees, that can slow down the water and cause it to</p> <p>12 raise in level.</p> <p>13 So all of that is part of stream flow</p> <p>14 hydraulics and how the river moves over time.</p> <p>15 Q. What is an example of a stream flow</p> <p>16 hydraulics issue that you analyzed and solved on the</p> <p>17 Rio Grande River?</p> <p>18 A. Okay. So there's a few different instances</p> <p>19 where we've had specific issues. El Indio gage,</p> <p>20 which is one of the gages on the Rio Grande, we had</p> <p>21 data that, upon review, we did not believe to be</p> <p>22 accurate. So we had to perform some hydraulic</p> <p>23 analysis within that reach in order to come up with a</p> <p>24 more accurate record because we -- and at that point</p> <p>25 we used multiple gages, as well as scientific study,</p> | <p style="text-align: right;">16</p> <p>1 THE WITNESS: Aquatic Informatics.</p> <p>2 THE REPORTER: Thank you.</p> <p>3 Q. (BY MR. STONE) Did you rely on the Aquatic</p> <p>4 Informatics software in reaching any of your expert</p> <p>5 opinions in this case?</p> <p>6 A. Only thing I reviewed was the data that we</p> <p>7 present publicly using that software we have</p> <p>8 published on our web site.</p> <p>9 Q. What is the GOES Data Collection network?</p> <p>10 A. The GOES Data Collection network is a system</p> <p>11 that's operated by NOAA, so it's part of the GOES</p> <p>12 weather satellite, which is -- there's two or three</p> <p>13 of them that are currently deployed across North</p> <p>14 America as well as some down in South America.</p> <p>15 As a part of that, along with all the</p> <p>16 sensors, is the data collection systems. So it is a</p> <p>17 system that is used by the federal primarily, and</p> <p>18 then, also, you have local entities and others that</p> <p>19 have access to it. And it's really used for the</p> <p>20 transmission and collection of environmental data.</p> <p>21 Q. You used a term there -- just for the court</p> <p>22 reporter, can you -- what do you mean when you say</p> <p>23 the word "NOAA"?</p> <p>24 A. National Oceanic Science -- I forget the</p> <p>25 full acronym, but it's the head agency for the</p> |
| <p style="text-align: right;">15</p> <p>1 hydraulic equations and stuff, to come up with that</p> <p>2 determination.</p> <p>3 Q. What was the gage again?</p> <p>4 A. The Rio Grande at El Indio.</p> <p>5 Q. And what was the specific stream flow</p> <p>6 hydraulics issue that presented itself in that</p> <p>7 scenario?</p> <p>8 A. It related to the calibration of our</p> <p>9 stage-discharge curve. Upon review of the record,</p> <p>10 the -- we didn't believe that the data it was</p> <p>11 producing was accurate, and we did not have, due to</p> <p>12 the site conditions specifically at that time, a</p> <p>13 field measurement in order to verify those flows, so</p> <p>14 we had to use the hydraulic equations in order to</p> <p>15 make a determination.</p> <p>16 Q. So the data that was being produced by the</p> <p>17 gage was inaccurate?</p> <p>18 A. For that specific flow regime at the time,</p> <p>19 but it was a high flow.</p> <p>20 Q. What data management software is used by the</p> <p>21 Commission?</p> <p>22 A. The Commission employs the Aquarius hydro</p> <p>23 package, so it's a suite of programs produced by the</p> <p>24 company Aquatic Informatics.</p> <p>25 THE REPORTER: I'm sorry, Aquatic what?</p> | <p style="text-align: right;">17</p> <p>1 National Weather Service.</p> <p>2 Q. Did you rely on any information from the</p> <p>3 GOES Data Collection network in forming any of your</p> <p>4 opinions in this case?</p> <p>5 A. Only from the standpoint that the data that</p> <p>6 is transmitted to the satellites and then collected</p> <p>7 is part of the record that goes into the resulting</p> <p>8 data that I used for this report.</p> <p>9 Q. What is data ingestion software?</p> <p>10 A. Could you refer to the section?</p> <p>11 Q. You are an agency -- you put on here on</p> <p>12 page -- let me just -- for reference here, I'll point</p> <p>13 out on page 3 of your -- of Cortez Exhibit 1, under</p> <p>14 the first bullet point, you have "agency subject</p> <p>15 matter expert for water data -- water data management</p> <p>16 software, GOES data collection network, and data</p> <p>17 ingestion software." Did I read that accurately?</p> <p>18 A. I believe you did, yes.</p> <p>19 Q. Okay. So a minute ago I asked you what data</p> <p>20 ingestion software was, right?</p> <p>21 A. Uh-huh.</p> <p>22 Q. And you asked me to refer you to a specific</p> <p>23 section.</p> <p>24 A. Uh-huh.</p> <p>25 Q. So now that you've seen this section, as a</p> |

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| <p>18</p> <p>1 subject matter expert on it, what is data ingestion 2 software? 3 A. So that section is referring to -- so as 4 part of the transmission process for the GOES data 5 collection network, we operate a small satellite dish 6 at our headquarters office that's monitoring every 7 day and collecting the data that's transmitted by our 8 platforms that are deployed out in the field. 9 In order to get that data into Aquarius, 10 there is a software program called Open DCS, so it's 11 Open Data Collection System. So that ingests the 12 data that's coming off the satellite, parses it, 13 decodes it, and then supplies it to Aquarius for 14 ingest into our Aquarius database. 15 Q. And you're a subject matter expert on the 16 Open DCS? 17 A. Yes. 18 Q. Okay. Did you rely on Open DCS at all in 19 forming any of the opinions in your expert -- any of 20 your expert opinions in this case? 21 A. It's similar to Aquarius where the data from 22 GOES goes through Open DCS and then is fed to 23 Aquarius, but not the resulting record, just to 24 clarify. 25 Q. When you say, "not the resulting record,"</p> | <p>20</p> <p>1 software. 2 It also incorporates our flood operating 3 criteria. So if we were in a flood situation, that's 4 one of the tools we would use to manage -- to route 5 water through it and see what we need to do in order 6 to save the -- manage those flows. And then we also 7 use it for other purposes. 8 Q. When was the last time that you were -- this 9 segment of the Rio Grande River had flood conditions? 10 A. Beyond localized flooding -- let's say we 11 have something that comes off a creek and impacts a 12 small region. We last operated the reservoirs for 13 flood purposes in 2010. 14 Q. Did you rely on the RiverWare modeling 15 software for any of your expert opinions in this 16 case? 17 A. No. 18 Q. Let's switch exhibits. I'm sharing with the 19 court -- I'll give it a minute to upload -- what 20 we're marking as Cortez Exhibit 2. This is a copy of 21 your expert report. 22 (Cortez Exhibit 2 marked.) 23 A. Okay. 24 Q. (BY MR. STONE) Are you able to see it on 25 the screen here?</p> |
| <p>19</p> <p>1 what do you mean? 2 A. The -- I only referred to the resulting 3 record, not the individual values that are 4 transmitted through that system. 5 Q. What is a satellite telemetry network? 6 A. It's the same thing as the GOES data 7 collection network. 8 Q. It's actually the same thing as GOES? 9 A. (Nodding head up and down.) 10 Q. Okay. What is the RiverWare modeling 11 software? 12 A. RiverWare is a -- it's a modeling software 13 used for operations of reservoirs, stream gages, and 14 basins used by multiple agencies, including the IBWC. 15 It has a simulation capability. So if I have two 16 reservoir systems, I can simulate water coming in and 17 out of it, or you can have a rule-based policy level 18 where you're actually programmatically saying, "At 2 19 I do this. At 3 I do this. 4 I do this." And we 20 use both at the IBWC. 21 Q. What do you use them for? 22 A. We use it as part of our binational 23 accounting. So that's what I referred to previously 24 where we have to determine the ownership of water. 25 So we have a monthly accounting that uses that</p> | <p>21</p> <p>1 A. I am, yes. 2 Q. So I have a couple of questions I want to go 3 through with respect to your report. I guess we 4 don't have to necessarily start here on page 37. 5 I'll go to the first page for you. 6 Does this report contain a complete 7 statement of all the opinions that you will express 8 in this case and the basis and reasons for them? 9 A. Yes. 10 Q. Does this report contain the facts or data 11 considered by you in forming all of your opinions in 12 this case that you will express? 13 A. I believe so, yes. 14 Q. Does this report contain all exhibits that 15 will be used to summarize or support all opinions 16 that you will express in this case? 17 A. I believe so, yes. 18 Q. Did you write this report? 19 A. Yes, I did. 20 Q. Did you write this report with the 21 assistance of any other person? 22 A. No, I did not. 23 Q. Did you use artificial intelligence in the 24 preparation of this expert report? 25 A. I did not.</p> |

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| <p style="text-align: right;">22</p> <p>1 MR. HARRISON: Just to clarify, are</p> <p>2 you -- is this the supplemented report that we sent</p> <p>3 yesterday, or is this the original one that you've</p> <p>4 marked as Exhibit 2? Okay. So it is the supplement.</p> <p>5 Okay, thank you.</p> <p>6 Q. (BY MR. STONE) Approximately how many hours</p> <p>7 did it take you to write this report?</p> <p>8 A. In total -- review, drafts, all that</p> <p>9 stuff -- 30 to 40, but that's a guess. Time flies</p> <p>10 when you're doing this stuff.</p> <p>11 Q. 30 to 40 hours?</p> <p>12 A. That's my -- that's a guess just based off</p> <p>13 of what I think, but it's -- a significant amount of</p> <p>14 time was spent on it.</p> <p>15 MR. HARRISON: Do we need to check the</p> <p>16 door? Can we go off real quick?</p> <p>17 MR. STONE: Okay. Let's go off the</p> <p>18 record.</p> <p>19 THE VIDEOGRAPHER: The time is 9:44 a.m.</p> <p>20 We're off the record.</p> <p>21 (Brief pause.)</p> <p>22 THE VIDEOGRAPHER: Time is 9:45 a.m. We</p> <p>23 are back on the record.</p> <p>24 Q. (BY MR. STONE) So I want to ask you about</p> <p>25 some of your communications with your attorneys in</p> | <p style="text-align: right;">24</p> <p>1 A. Yes, they are.</p> <p>2 Q. Other than the documents listed in</p> <p>3 Section 11, did you review any other documents or</p> <p>4 information in preparation for your expert testimony</p> <p>5 today?</p> <p>6 A. Nothing.</p> <p>7 Q. Did you meet with the attorneys for the U.S.</p> <p>8 in preparation for your testimony today?</p> <p>9 A. Yes, we have met.</p> <p>10 Q. How many times?</p> <p>11 A. Three or four.</p> <p>12 Q. How long ago was the first meeting?</p> <p>13 A. It was last week.</p> <p>14 Q. And I'm not going to ask about the substance</p> <p>15 of any of the conversations, okay? I'm just asking</p> <p>16 about the meetings.</p> <p>17 When did you meet with them for the</p> <p>18 first time last week?</p> <p>19 A. I believe it was last Wednesday, but I'm</p> <p>20 very busy and the time flies.</p> <p>21 Q. Uh-huh. Approximately how long did you meet</p> <p>22 for?</p> <p>23 A. About a couple of hours.</p> <p>24 Q. When was the second time you met?</p> <p>25 A. It was a couple of days later, so Friday.</p> |
| <p style="text-align: right;">23</p> <p>1 this case.</p> <p>2 What facts did the attorneys provide</p> <p>3 you -- provide that you considered in forming the</p> <p>4 opinions to be expressed in this case?</p> <p>5 A. Facts? No facts.</p> <p>6 Q. What data did the attorneys provide that you</p> <p>7 considered in forming the opinions to be expressed in</p> <p>8 this case?</p> <p>9 A. No data.</p> <p>10 Q. What assumptions did the attorneys provide</p> <p>11 to you that you considered in forming the opinions to</p> <p>12 be expressed in this case?</p> <p>13 A. Define "assumptions."</p> <p>14 Q. "Assumptions" means things that you were</p> <p>15 told to assume were true for the purposes of your</p> <p>16 expert report.</p> <p>17 A. Nothing to assume true.</p> <p>18 Q. Going to page 37 of Cortez Exhibit 2, your</p> <p>19 expert report, Section 11, the Documents Reviewed and</p> <p>20 Referenced. Do you see that on the screen?</p> <p>21 A. I do.</p> <p>22 Q. Are these the documents -- are the -- strike</p> <p>23 that.</p> <p>24 Are these the only documents that you</p> <p>25 relied on in preparation for your expert report?</p> | <p style="text-align: right;">25</p> <p>1 Q. And how long did you meet on Friday?</p> <p>2 A. A couple of hours.</p> <p>3 Q. When was the third time you met?</p> <p>4 A. Yesterday.</p> <p>5 Q. And how long did you meet for?</p> <p>6 A. A few hours, maybe three hours.</p> <p>7 Q. You said three hours?</p> <p>8 A. Three hours, thereabout.</p> <p>9 Q. Let's see. Two, four -- so about seven</p> <p>10 hours you met total?</p> <p>11 A. That would probably be about right.</p> <p>12 Q. All right.</p> <p>13 Next I'm showing you what I've marked as</p> <p>14 Cortez Exhibit No. 3 --</p> <p>15 THE REPORTER: Yes.</p> <p>16 (Cortez Exhibit 3 marked.)</p> <p>17 Q. (BY MR. STONE) And let me share it on the</p> <p>18 screen. Are you able to see this document on the</p> <p>19 screen clearly?</p> <p>20 A. I do, yes.</p> <p>21 Q. This document is dated January 24th, 2024,</p> <p>22 right?</p> <p>23 A. Yes, that's what it says.</p> <p>24 Q. Have you seen this document before?</p> <p>25 A. I do not recall seeing it.</p> |

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| <p>26</p> <p>1 Q. This is your initial expert designation. So</p> <p>2 I'm going to read the section here aloud, and just</p> <p>3 tell me if I'm reading this correctly.</p> <p>4 "Mr. Cortez is expected to testify</p> <p>5 regarding the decision factors and procedures for</p> <p>6 water releases from Amistad Dam; dam release</p> <p>7 information; regional hydraulic [sic] inputs and</p> <p>8 outputs; and information about water levels</p> <p>9 downstream of Amistad Dam as they relate to</p> <p>10 navigability." Did I read that accurately?</p> <p>11 A. Yes.</p> <p>12 THE REPORTER: I'm sorry, what was your</p> <p>13 answer?</p> <p>14 THE WITNESS: Yes.</p> <p>15 THE REPORTER: Thank you.</p> <p>16 Q. (BY MR. STONE) Next I'm going to show what</p> <p>17 I am marking as Cortez Exhibit 4.</p> <p>18 (Cortez Exhibit 4 marked.)</p> <p>19 Q. (BY MR. STONE) Do you see it on the screen</p> <p>20 right here?</p> <p>21 A. Yes, I do.</p> <p>22 Q. This is the -- your amended expert</p> <p>23 designation dated May 3rd, 2024. Have you seen this</p> <p>24 document before?</p> <p>25 A. I do not recall seeing it.</p> | <p>28</p> <p>1 released from Amistad Dam?</p> <p>2 A. It depends on where you are in terms of the</p> <p>3 storage of the dam. So if you're under a flood</p> <p>4 situation, then we have flood criteria and procedures</p> <p>5 that we would follow for the evacuation of waters</p> <p>6 within the flood pool.</p> <p>7 If you're down below that level in the</p> <p>8 conservation storage, then it relates to the water</p> <p>9 that is owned by two countries who can call upon that</p> <p>10 water for their use, and how that -- in the sense</p> <p>11 that that -- operating dam is part of the</p> <p>12 Commission's responsibility to convey those waters</p> <p>13 for those stakeholders.</p> <p>14 Q. You testified a little bit ago that the last</p> <p>15 time that you were in flood conditions was in 2010,</p> <p>16 right?</p> <p>17 A. That is accurate, yes.</p> <p>18 Q. So is it fair to say that since 2010 you've</p> <p>19 been at the water conservation levels at the -- at</p> <p>20 Amistad Dam?</p> <p>21 A. At Amistad Dam? Yes.</p> <p>22 Q. So what are the decision factors for water</p> <p>23 releases from the Amistad Dam during conservation</p> <p>24 water levels?</p> <p>25 A. As it relates to the physical structure of</p> |
| <p>27</p> <p>1 Q. Okay. I'm going to read the highlighted</p> <p>2 section under your name, and tell me if I'm reading</p> <p>3 it accurately.</p> <p>4 "Mr. Cortez is expected to" -- hang on.</p> <p>5 All right. There we go.</p> <p>6 "Mr. Cortez is expected to testify</p> <p>7 regarding the decision factors and procedures for</p> <p>8 water releases from Amistad Dam; dam release</p> <p>9 information; regional hydrologic inputs and outputs;</p> <p>10 information about water levels downstream of Amistad</p> <p>11 Dam as these relate to navigability; and the USIBWC's</p> <p>12 use of watercraft in support of its operations on the</p> <p>13 Rio Grande." Did I read that accurately?</p> <p>14 A. You did, I believe, yes. Yes.</p> <p>15 Q. So are you testifying in this case as an</p> <p>16 expert on any topics that are not listed in this</p> <p>17 designation?</p> <p>18 A. I don't believe so, no.</p> <p>19 Q. So let's start with the top. We're going to</p> <p>20 kind of go through each of these a little bit.</p> <p>21 Will you be providing expert opinions on</p> <p>22 the decision factors for water releases from Amistad</p> <p>23 Dam?</p> <p>24 A. Yes.</p> <p>25 Q. What are the decision factors for water</p> | <p>29</p> <p>1 the dam?</p> <p>2 Q. I'm sorry, what? What do you mean the --</p> <p>3 "as it relates to the physical structure of the dam"?</p> <p>4 A. Right. So the dam itself has physical</p> <p>5 limitations, right? So your outlet works are going</p> <p>6 to be at a certain elevation. Your power pool</p> <p>7 generation capability is going to be at another</p> <p>8 elevation.</p> <p>9 So as it respects to dam release</p> <p>10 information, it would be -- and the decision-making</p> <p>11 would be, with regards to that topic, whether or not</p> <p>12 we can physically move the water out of the dam at</p> <p>13 different elevations. And that's part of the topics</p> <p>14 and things that the Commission would be looking at.</p> <p>15 Q. So I guess what I'm trying to understand --</p> <p>16 and let me just see if my question can be more</p> <p>17 specific.</p> <p>18 A. Uh-huh.</p> <p>19 Q. What expert opinions do you have in this</p> <p>20 case about the decision factors for water releases</p> <p>21 from the Amistad Dam at conservation water levels?</p> <p>22 A. Only from the standpoint of who is making</p> <p>23 those decisions.</p> <p>24 Q. And who is making those decisions?</p> <p>25 A. If it is -- if the water is owned by the</p> |

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| <p>30</p> <p>1 United States, it -- that the water is under control 2 of the Texas watermaster. And then, if it's under -- 3 water that's owned by Mexico, it's in CONAGUA and 4 through their user associations and domestic laws 5 that make those determinations.</p> <p>6 Q. So the only expert opinions you have in this 7 case as it relates to the decision factors for water 8 releases from the Amistad Dam at conservation water 9 levels is that that decision is made by the TCEQ 10 watermaster?</p> <p>11 MR. HARRISON: Objection. Form. You 12 can answer.</p> <p>13 A. And then as how it relates to the treaty and 14 implement -- and implementation of the provisions of 15 the treaty, as there's specific guidelines on the use 16 of the water that are described in the articles of 17 the treaty and the general rules for how the dams are 18 operated.</p> <p>19 Q. (BY MR. STONE) Okay. So let's go through 20 those.</p> <p>21 What are the decision factors for water 22 releases from the Amistad Dam at water conservation 23 levels?</p> <p>24 A. In relates to a specific or just in general? 25 Q. In general.</p> | <p>32</p> <p>1 what decision factors do you use to determine water 2 releases from the Amistad Dam during conservation 3 water levels?</p> <p>4 MR. HARRISON: Objection. Form.</p> <p>5 A. We would not make any decisions. It's their 6 water. As long as it's physically possible to convey 7 that water, the Commission would make that release.</p> <p>8 Q. (BY MR. STONE) So during conservation water 9 levels at Amistad Dam, when there is a water release, 10 what decision factors do you have to go through 11 before making that water release?</p> <p>12 A. Could you restate the question, just so I 13 could make sure I understood?</p> <p>14 Q. Sure. When there is a water release done at 15 the Amistad Dam, what decision factors do you go 16 through?</p> <p>17 A. Okay. So both countries are going to make a 18 request -- we'll say TCEQ and Mexico. Because 19 Amistad is a power-generating facility, there are 20 decisions that are made on how the generators and 21 turbines are operated in order to release the order 22 request.</p> <p>23 So if they want 20, then the power plant 24 operators will make a decision based off of how to 25 make that release through the turbines in order to</p> |
| <p>31</p> <p>1 A. Okay. So the treaty itself specifies 2 certain guideline rules in terms of how water is 3 evacuated and used -- again flood, but we haven't 4 been in flood situation.</p> <p>5 And then there is also rules as it 6 relates to -- we'll use Amistad as an example. The 7 release of water from Amistad would be for the 8 purposes of beneficial use or storing water into 9 Falcon. And there's general operating rules also to 10 maintain Amistad at a higher conservation, since it's 11 the highest upstream international dam.</p> <p>12 So the goal is -- in order to -- best 13 practices, to store water and use it as efficiently 14 as possible, you would want to keep it in your higher 15 reservoir. And that's part of the treaty.</p> <p>16 Q. So if the TCEQ watermaster -- strike that. 17 When I use the word "TCEQ," do you 18 understand that I mean the Texas Commission -- well, 19 what do you understand I mean to mean when I say 20 "TCEQ"?</p> <p>21 MR. HARRISON: Objection. Form.</p> <p>22 A. I understand it to be the Texas Commission 23 on Environmental Quality.</p> <p>24 Q. (BY MR. STONE) Okay. When you receive a 25 request for water release from the TCEQ watermaster,</p> | <p>33</p> <p>1 generate energy off that release well.</p> <p>2 Q. And when you say "20," what do you mean?</p> <p>3 A. I just used a figure for reference.</p> <p>4 Q. But even using that figure for reference, 5 20 -- what would it be? 20 of what?</p> <p>6 A. So if TCEQ wanted, let's say, 8,000 CFS, 7 Mexico wanted 8,000 CFS as an order, the power plant 8 generators or operators would then make a 9 determination on how to manage their system to make 10 that release.</p> <p>11 Q. And just for the record, when you use "CFS," 12 what are you specifically referring to?</p> <p>13 A. CFS stands for cubic feet per second.</p> <p>14 Q. How do you know what the decision factors 15 are for water releases from the Amistad Dam when the 16 water is at conservation levels?</p> <p>17 A. Just from my experience working with the 18 agency, because we do the accounting -- so because we 19 do the accounting of the waters on a monthly and a 20 weekly basis, we have to know what each country has 21 ordered so that we can charge it appropriately. And 22 through that we also work with the power plant 23 operators to collect that data: Understand, you 24 know, if TCEQ is ordering 8,000 CFS, Mexico is 25 ordering 8,000 CFS, how that was done during the</p> |

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| <p>34</p> <p>1 week.</p> <p>2 Q. Are you offering fact testimony or opinion</p> <p>3 testimony about the decision factors for water</p> <p>4 releases from the Amistad Dam at conservation levels?</p> <p>5 MR. HARRISON: Objection. Form.</p> <p>6 A. I believe I would be offering fact</p> <p>7 testimony.</p> <p>8 Q. (BY MR. STONE) Is there any -- are the</p> <p>9 decision factors for water releases from the Amistad</p> <p>10 Dam when it's at conservation levels written down?</p> <p>11 A. Decision factors being what I referred to</p> <p>12 for the power plant operations --</p> <p>13 Q. Yes.</p> <p>14 A. I believe they are, although I have not</p> <p>15 reviewed them myself.</p> <p>16 Q. Do those written decision factors govern</p> <p>17 how -- strike that.</p> <p>18 Have you ever governed -- strike that.</p> <p>19 Have you ever reviewed the document for</p> <p>20 Amistad Dam that details the decision factors?</p> <p>21 A. Which document are you referring to?</p> <p>22 Q. The document that you just said you hadn't</p> <p>23 reviewed.</p> <p>24 A. Then I have not reviewed it.</p> <p>25 Q. Have you ever reviewed it?</p> | <p>36</p> <p>1 water.</p> <p>2 Q. (BY MR. STONE) Next I've got you in here as</p> <p>3 providing expert opinions on the procedures for water</p> <p>4 releases from the Amistad Dam, right?</p> <p>5 A. "Expert to testify -- supply." Will you say</p> <p>6 it again, please?</p> <p>7 Q. Sure. It says here that you are expected</p> <p>8 "to testify regarding the decision factors and</p> <p>9 procedures for water releases from Amistad Dam,"</p> <p>10 right?</p> <p>11 A. That is what it says, yes.</p> <p>12 Q. Are you an expert on the procedures for</p> <p>13 water releases from Amistad Dam?</p> <p>14 MR. HARRISON: Objection. Form.</p> <p>15 A. Not the specifics for power generation, no.</p> <p>16 Q. (BY MR. STONE) Is power generation the only</p> <p>17 procedure for water releases from Amistad Dam?</p> <p>18 A. No. There would also be procedures for</p> <p>19 releases out of the irrigation gates that are not</p> <p>20 used for generating power.</p> <p>21 Q. Are you an expert on those -- the procedures</p> <p>22 for those releases?</p> <p>23 A. I am not.</p> <p>24 Q. Are you an expert on -- for the procedures</p> <p>25 for any water releases from Amistad Dam?</p> |
| <p>35</p> <p>1 MR. HARRISON: Objection. Asked and</p> <p>2 answered.</p> <p>3 A. Not to my recollection.</p> <p>4 Q. (BY MR. STONE) How do you know it exists?</p> <p>5 A. References to it in other documents.</p> <p>6 Q. Have you ever personally made decisions</p> <p>7 about the decision factors for water releases at the</p> <p>8 Amistad Dam during conservation water levels?</p> <p>9 A. During conservation, no.</p> <p>10 Q. What opinions do you have in this case about</p> <p>11 the decision factors for water releases from Amistad</p> <p>12 Dam during conservation water levels?</p> <p>13 A. I have no opinions that I cover in my</p> <p>14 report.</p> <p>15 Q. Isn't it true that the Commission makes no</p> <p>16 decision as to why water is released at the Amistad</p> <p>17 Dam while it's at conservation levels?</p> <p>18 MR. HARRISON: Objection. Form.</p> <p>19 A. Except for extenuating emergency situations,</p> <p>20 that would be my understanding, yes.</p> <p>21 Q. (BY MR. STONE) That decision rests solely</p> <p>22 with TCEQ absent some emergency situation, right?</p> <p>23 A. Or --</p> <p>24 MR. HARRISON: Objection. Form.</p> <p>25 A. Or with Mexico for their portion of the</p> | <p>37</p> <p>1 A. Only the general procedures of how we</p> <p>2 operate.</p> <p>3 Q. What are the general procedures for how you</p> <p>4 operate?</p> <p>5 A. So, for instance, who is responsible for</p> <p>6 making the releases. So Texas -- Texas has Texas</p> <p>7 Commission on Environmental Water Quality, who has a</p> <p>8 watermaster. How we then take that data or</p> <p>9 information as it relates to our water accounting,</p> <p>10 the general management of the flows, as it goes</p> <p>11 downstream, understanding that there's a water order.</p> <p>12 Those can be reductions or water taken in and out of</p> <p>13 the river moving downstream. This all plays into a</p> <p>14 factor.</p> <p>15 And then anytime that we are near a</p> <p>16 critical threshold of the dam -- "critical" being,</p> <p>17 let's say, power pool. So the point where we can no</p> <p>18 longer generate power -- then we would also be</p> <p>19 looking at it from the standpoint of what projections</p> <p>20 and information are we looking at to see where we</p> <p>21 expect the dam to end up based off operations.</p> <p>22 Q. Are the general procedures for how you</p> <p>23 operate water releases from the Amistad Dam when it's</p> <p>24 at conservation levels written down?</p> <p>25 A. Beyond what is in the treaty and the minutes</p> |

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| <p>38</p> <p>1 relating to the operations rules and procedures for 2 Amistad Dam, there's working documents that we have, 3 but they are not final at this point. 4 Q. Do those written documents that are not 5 final govern how the general procedures are for how 6 you operate water releases from the Amistad Dam when 7 it's at conservation water levels? 8 MR. HARRISON: Objection. 9 Deliberative -- invoking deliberative process. 10 Privileged to the extent that these reflect 11 predecisional documents. 12 So if you're able to answer without 13 revealing that information, then you can answer. 14 Otherwise, I would instruct you not to answer. 15 THE WITNESS: Okay. 16 A. If you could restate the question. If you 17 could say the question again because I -- 18 Q. (BY MR. STONE) Yeah, I'm trying to 19 determine are you making the determinations, or are 20 you being gover -- is there a document that's telling 21 you what the general procedures are for how you 22 operate water releases from the Amistad Dam when it's 23 at water conservation levels? 24 A. There -- so in terms of physical 25 limitations, what is capable of the dam, there are</p> | <p>40</p> <p>1 A. It does not. 2 Q. Can you describe generally what expertise 3 would be necessary for a person to determine the 4 general procedures for how the Commission operates 5 water releases from the Amistad Dam when it's at 6 water conservation levels? 7 MR. HARRISON: Objection. Form. 8 A. So the treaty specifies the general 9 operating rules for both dams. If you're getting 10 into the specific acting as a watermaster, where 11 you're taking orders from all your stakeholders and 12 such, that's a different area outside of my 13 responsibilities. 14 Q. (BY MR. STONE) And anyone can read the 15 treaty, right? 16 MR. HARRISON: Objection. Form. 17 A. Yes. It is a public document. 18 Q. (BY MR. STONE) So is it fair to say that 19 you don't need a specialized expertise to be able to 20 read the treaty and know what the general procedures 21 are for how the Commission operates water releases 22 from the Amistad Dam when it's at water conservation 23 levels? 24 MR. HARRISON: Objection. Calls for a 25 legal conclusion. Form.</p> |
| <p>39</p> <p>1 documents for that. But in terms of TCEQ making a 2 request, we would follow that request if physically 3 possible. 4 Q. So I'm trying to understand are you an 5 expert on this, or are you just -- you're -- just 6 comply with whatever the written procedure is? 7 MR. HARRISON: Objection. Form. 8 A. I'm providing testimony on how the 9 Commission has operated the Amistad Dam. 10 Q. (BY MR. STONE) Is water ever released from 11 the Amistad Dam just for power generation? 12 A. From Amistad Dam? To my understanding and 13 knowledge, we do make continual releases out of the 14 dam, but that is based off of expected use, and that 15 request is made by both countries. 16 Q. Mr. Cortez, power generation is incidental 17 to other demands for water use when it comes to 18 releases from the Amistad Dam, right? 19 MR. HARRISON: Objection. Form. 20 A. It is incidental; it's not the primary goal. 21 Q. (BY MR. STONE) Right. The Amistad Dam 22 doesn't just release water solely for power 23 generation purposes, does it? 24 A. It does not. 25 Q. And neither does the Falcon Dam?</p> | <p>41</p> <p>1 A. In the sense that it is a public document 2 and people can review it and form opinions and 3 decisions based off what they read, that is possible. 4 Q. (BY MR. STONE) You mentioned earlier 5 that -- there was some assertion of deliberative 6 process earlier about some document relating to the 7 general procedures for how the Commission operates 8 water releases from the Amistad Dam. Do you remember 9 that? 10 A. I do. 11 Q. Were you relying on those documents when you 12 formed your expert opinions in this case? 13 A. No, not at all. 14 Q. Are you offering fact testimony or opinion 15 testimony about the procedure for water releases from 16 the Amistad Dam at water conservation levels? 17 A. Fact testimony. 18 MR. HARRISON: Objection. Form. 19 A. Oh, sorry. Fact testimony. 20 Q. (BY MR. STONE) What opinions, if any, do 21 you have in this case about the procedures for water 22 releases from the Amistad Dam at water conservation 23 levels? 24 A. You said "opinions"? 25 Q. If any.</p> |

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| <p style="text-align: right;">42</p> <p>1 A. No opinions.</p> <p>2 Q. So next on this it just says, "dam release</p> <p>3 information." What is dam release information?</p> <p>4 A. I believe that just relates to releases from</p> <p>5 Amistad Dam in this case.</p> <p>6 Q. Is that different than what we just talked</p> <p>7 about?</p> <p>8 A. I'm not sure.</p> <p>9 MR. HARRISON: Objection. Foundation.</p> <p>10 A. I'm not sure what the -- if there was a</p> <p>11 ment -- if there was a desired difference between</p> <p>12 those two statements.</p> <p>13 Q. (BY MR. STONE) Are you an expert on dam</p> <p>14 release information?</p> <p>15 MR. HARRISON: Objection. Foundation.</p> <p>16 A. Without understanding the exact context of</p> <p>17 what they're referring to in this document, I could</p> <p>18 not answer that question.</p> <p>19 Q. (BY MR. STONE) Do you --</p> <p>20 A. I would like to clarify that last statement.</p> <p>21 Q. Yeah, yeah, absolutely. If you can figure</p> <p>22 out what it means, go ahead.</p> <p>23 A. I believe what they're relating to is the</p> <p>24 physical design of the dam. So both its outlet</p> <p>25 works -- so its ability to take water out of the dam,</p> | <p style="text-align: right;">44</p> <p>1 its release capabilities as I note in my expert</p> <p>2 report.</p> <p>3 Q. Are you an expert on it?</p> <p>4 MR. HARRISON: Objection. Calls for a</p> <p>5 legal conclusion.</p> <p>6 A. I would consider myself very, very</p> <p>7 knowledgeable in that it does relate to my job</p> <p>8 duties.</p> <p>9 Q. (BY MR. STONE) And you didn't design the</p> <p>10 dam, the Amistad Dam, did you?</p> <p>11 A. I did not.</p> <p>12 Q. Have you studied the schematics for the</p> <p>13 Amistad Dam?</p> <p>14 A. I have previously, yes.</p> <p>15 Q. There's some images of the Amistad Dam in</p> <p>16 your -- and its physical construct within your expert</p> <p>17 report, right?</p> <p>18 A. That is correct.</p> <p>19 Q. Okay. So assuming you're an expert on dam</p> <p>20 release information as it relates to the -- well,</p> <p>21 strike that.</p> <p>22 Other than the Amistad Dam -- strike</p> <p>23 that.</p> <p>24 Are you an expert on dam release</p> <p>25 information as it relates to any dams other than the</p> |
| <p style="text-align: right;">43</p> <p>1 you know, the power-generator runs the irrigation</p> <p>2 valves, and then critical thresholds and things like</p> <p>3 that as well as the storage volumes of the dam</p> <p>4 itself. I believe that's what that section is</p> <p>5 referring to.</p> <p>6 Q. Okay. So the "dam release information," you</p> <p>7 mean like the physical construct of the dam itself as</p> <p>8 it releases water?</p> <p>9 A. That's my --</p> <p>10 MR. HARRISON: Objection. Foundation.</p> <p>11 A. Sorry. That's my understanding of that.</p> <p>12 Q. (BY MR. STONE) Okay. And are you an expert</p> <p>13 on dam release information as described?</p> <p>14 A. For --</p> <p>15 MR. HARRISON: Same objection.</p> <p>16 THE WITNESS: I'm sorry.</p> <p>17 Q. (BY MR. STONE) Let me -- let's slow down</p> <p>18 for a minute. When you answer, if you could just</p> <p>19 pause a beat --</p> <p>20 A. Yeah, yeah.</p> <p>21 Q. -- so that way this guy can object, okay?</p> <p>22 A. Yeah.</p> <p>23 Q. Okay. Go ahead.</p> <p>24 A. Okay. Right. So I -- I'm very familiar</p> <p>25 with Amistad Dam, the structure of the dam itself and</p> | <p style="text-align: right;">45</p> <p>1 Amistad Dam on the Rio Grande River?</p> <p>2 MR. HARRISON: Objection. Form.</p> <p>3 A. I am knowledgeable of other dams as it</p> <p>4 relates to their release capabilities, including</p> <p>5 Falcon Dam.</p> <p>6 Q. (BY MR. STONE) Falcon Dam is one. You said</p> <p>7 others. Is there other dams that you're an expert on</p> <p>8 other than the Falcon Dam and the Amistad Dam on the</p> <p>9 Rio Grande River?</p> <p>10 MR. HARRISON: Objection. Form.</p> <p>11 A. I wouldn't say expert; just knowledgeable of</p> <p>12 their capabilities for -- as it relates to my job</p> <p>13 duties.</p> <p>14 Q. (BY MR. STONE) So you're only an expert on</p> <p>15 the Falcon Dam and the Amistad Dam's water releases?</p> <p>16 MR. HARRISON: Objection. Form.</p> <p>17 Q. (BY MR. STONE) Information -- sorry.</p> <p>18 Strike that.</p> <p>19 So you're only an expert on the Amistad</p> <p>20 and Falcon Dam release information?</p> <p>21 MR. HARRISON: Same objection.</p> <p>22 A. Yes, that's -- it relates specifically to my</p> <p>23 job duties for Amistad and Falcon Dam.</p> <p>24 Q. (BY MR. STONE) Is it fair to say you're</p> <p>25 only an expert to the extent that it relates to your</p> |

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| <p>46</p> <p>1 current job duties?</p> <p>2 MR. HARRISON: Objection. Form.</p> <p>3 A. I believe that's an accurate statement.</p> <p>4 Q. (BY MR. STONE) Aside from your job duties,</p> <p>5 you don't have any independent expertise on the</p> <p>6 Amistad or Falcon Dams as it relates to water release</p> <p>7 information?</p> <p>8 A. No.</p> <p>9 Q. Let's do both, starting with the Amistad</p> <p>10 Dam. Are you providing fact testimony or opinion</p> <p>11 testimony in this case about Amistad Dam release</p> <p>12 information?</p> <p>13 MR. HARRISON: Objection. Form.</p> <p>14 A. Fact testimony.</p> <p>15 Q. (BY MR. STONE) Are you providing fact</p> <p>16 testimony or opinion testimony about Falcon Dam</p> <p>17 release information?</p> <p>18 MR. HARRISON: Objection. Form.</p> <p>19 A. Falcon was only briefly covered in the</p> <p>20 report just to give an ending point for that section</p> <p>21 of the river. So within the confines of the report,</p> <p>22 I'm providing expert information or facts about</p> <p>23 Falcon as it relates to accepting the waters from</p> <p>24 Amistad.</p> <p>25 Q. (BY MR. STONE) What is an expert fact?</p> | <p>48</p> <p>1 tributaries, creeks, arroyos that come into the Rio</p> <p>2 Grande.</p> <p>3 Q. What are the regional hydrologic inputs and</p> <p>4 outputs on the Rio Grande River?</p> <p>5 A. It is a very large basin, so that's going to</p> <p>6 be a significant list. I'm aware of the major ones</p> <p>7 that come into the international reach.</p> <p>8 Q. What are the major ones?</p> <p>9 A. For the entire reach or a specific area?</p> <p>10 Q. Yeah. Remember, when I say, "Rio Grande</p> <p>11 River," I mean that mile marker 275.5 to 610, right?</p> <p>12 A. Right. Could you clarify just so I have a</p> <p>13 full understanding of your -- could you provide the</p> <p>14 locations for those just so I make sure I'm --</p> <p>15 Q. Yeah.</p> <p>16 A. -- specific?</p> <p>17 Q. So river mile -- when I say, "Rio Grande</p> <p>18 River" or "reach," I'm specifically referring to</p> <p>19 river miles 275.5 to 610.</p> <p>20 A. Okay. And could you provide the exhibit for</p> <p>21 that, because I don't exactly remember the river</p> <p>22 mileages for all the points. It was one of the</p> <p>23 documents cited.</p> <p>24 Q. Okay. Which document did you -- can you</p> <p>25 specifically refer --</p> |
| <p>47</p> <p>1 A. I don't know.</p> <p>2 Q. Do you have any opinions about the Falcon</p> <p>3 Dam release information?</p> <p>4 A. No. And the expert report does not cover</p> <p>5 Falcon Dam release information.</p> <p>6 Q. I see. Okay.</p> <p>7 Next it says, "Regional" -- hold on.</p> <p>8 Before I move on, let me make sure I don't have any</p> <p>9 more questions about that.</p> <p>10 Before we move on, do you have any</p> <p>11 expert opinions in this case about Amistad Dam</p> <p>12 release information?</p> <p>13 A. Expert opinions, no.</p> <p>14 Q. Do you have any expert opinions in this case</p> <p>15 about Falcon Dam release information?</p> <p>16 A. No.</p> <p>17 Q. Next it says, "Regional hydraulic [sic]</p> <p>18 inputs and outputs." Do you know what that means?</p> <p>19 A. Yes, I do.</p> <p>20 THE WITNESS: Sorry.</p> <p>21 MR. HARRISON: Objection. Foundation.</p> <p>22 A. Yes, I do.</p> <p>23 Q. (BY MR. STONE) Okay. What is meant by</p> <p>24 "regional hydraulic inputs and outputs"?</p> <p>25 A. It's referring to the streams, the</p> | <p>49</p> <p>1 A. River kilometers. It's one of the...</p> <p>2 Q. Is it called, "Table of River Mileages"?</p> <p>3 Oh --</p> <p>4 A. That is correct.</p> <p>5 Q. -- I'm sharing my screen.</p> <p>6 Let me mark this and drag and drop it.</p> <p>7 A. Okay.</p> <p>8 Q. Give me a second. Better be careful what I</p> <p>9 open since it's going to pop right up.</p> <p>10 (Cortez Exhibit 5 marked.)</p> <p>11 Q. (BY MR. STONE) I am showing you what I am</p> <p>12 marking as Cortez Exhibit 5, Rio Grande River Miles.</p> <p>13 Do you see it on the screen?</p> <p>14 A. I do not.</p> <p>15 Q. Oh, sorry. Do you see it on the screen now?</p> <p>16 A. I do.</p> <p>17 Q. Okay. So this document is 11 pages long.</p> <p>18 Which -- is there a specific page you would need me</p> <p>19 to go to so that you can identify the inputs and</p> <p>20 outputs for the Rio Grande River?</p> <p>21 A. Not the Rio Grande River. I just want to</p> <p>22 know the river mileages that you were referencing</p> <p>23 with the locations --</p> <p>24 Q. Oh, you want to see 275.5 to 610 on this</p> <p>25 document. Okay.</p> |

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| <p>50</p> <p>1 Did you know that you were going to be</p> <p>2 testifying in this case about a segment of the Rio</p> <p>3 Grande River involving river mile 275.5 to 610?</p> <p>4 A. Not the specific river mileages.</p> <p>5 Q. Are you aware that that is the segment of</p> <p>6 the Rio Grande at issue in this case?</p> <p>7 A. I believe so, once I verify the --</p> <p>8 Q. Okay. Sure. We are on page 3 of Exhibit --</p> <p>9 Cortez Exhibit 5. Do you see page 3?</p> <p>10 A. I do.</p> <p>11 Q. Okay. Do you see the river mile -- or are</p> <p>12 you able to use this document to identify where river</p> <p>13 mile 275.5 is?</p> <p>14 A. Can I see the header just so I know which</p> <p>15 one -- miles on the right. And you said the number</p> <p>16 was 275?</p> <p>17 Q. You know what, I'm on the wrong page. Yeah.</p> <p>18 Let's go to page 4 of Cortez Exhibit 5. Are you able</p> <p>19 to see 275.5 on this document?</p> <p>20 A. Yes. So roughly between Falcon Dam, and I'm</p> <p>21 assuming the other point is Amistad?</p> <p>22 Q. Yeah. Well, let's scroll down and just make</p> <p>23 sure.</p> <p>24 A. I think you passed it.</p> <p>25 Q. I'm on page 7 of Cortez Exhibit 5. Do you</p> | <p>52</p> <p>1 Those would be the major ones that I can</p> <p>2 think of as well as diversions.</p> <p>3 Q. We'll come back to diversions. But are you</p> <p>4 offering fact testimony in this case or opinion</p> <p>5 testimony in this case about the hydrologic inputs</p> <p>6 and outputs on the Rio Grande River?</p> <p>7 MR. HARRISON: Objection. Form.</p> <p>8 A. I was asked to provide expert testimony on</p> <p>9 that.</p> <p>10 Q. (BY MR. STONE) Okay. What expert opinions</p> <p>11 do you have in this case about the hydrologic inputs</p> <p>12 and outputs on the Rio Grande River?</p> <p>13 A. I have no opinions.</p> <p>14 Q. Okay. Next -- let me put the document back</p> <p>15 up on the screen. Okay.</p> <p>16 Next I've got information about water</p> <p>17 levels downstream -- strike that.</p> <p>18 Let me start again and identify this</p> <p>19 document.</p> <p>20 So I'm showing you Cortez Exhibit 4,</p> <p>21 page 1.</p> <p>22 Next on this document, in the</p> <p>23 highlighted section, it says that you will be</p> <p>24 testifying as an expert about "information about</p> <p>25 water levels downstream of Amistad Dam as these</p> |
| <p>51</p> <p>1 see river mile 610?</p> <p>2 A. I do.</p> <p>3 Q. So this is the relevant segment I'm going to</p> <p>4 be asking questions about during the course of the</p> <p>5 deposition. Do you understand?</p> <p>6 A. I do, yes.</p> <p>7 Q. Okay. Perfect. Can I close this document</p> <p>8 now that I've given you a chance to refresh, or do</p> <p>9 you want me to keep it up?</p> <p>10 A. No, that's fine. Thank you.</p> <p>11 Q. Okay. All right. So what are the</p> <p>12 hydrologic inputs and outputs for the Rio Grande</p> <p>13 River?</p> <p>14 A. Okay. So for the Rio Grande River, upstream</p> <p>15 of Amistad Dam, which I believe is covered in that,</p> <p>16 you have the Devils and Pecos River, which come</p> <p>17 directly into the reservoir itself.</p> <p>18 Downstream of that you have Pinto Creek,</p> <p>19 Sycamore Creek, Elm Creek, San Felipe Creek, Arroyo</p> <p>20 de las Vacas, Rio San Dago -- Rio San Diego, Rio San</p> <p>21 Rodrigo, the Rio Salado, the Rio Escondido. Is that</p> <p>22 Sycamore? There's some other ones on the Mexican</p> <p>23 side, like Arroyo el Buey, a spring that comes in</p> <p>24 right down downstream of Amistad, that we also</p> <p>25 monitor.</p> | <p>53</p> <p>1 relate to navigability." Did I read that correctly?</p> <p>2 MR. HARRISON: Objection. Foundation.</p> <p>3 A. I believe so, yes.</p> <p>4 Q. (BY MR. STONE) Yes, I did read that</p> <p>5 correctly?</p> <p>6 A. I believe you read it correctly.</p> <p>7 Q. Okay. Will you be providing expert opinions</p> <p>8 on information about water levels downstream of</p> <p>9 Amistad Dam as these relate to navigability in this</p> <p>10 case?</p> <p>11 MR. HARRISON: Objection. Calls for a</p> <p>12 legal conclusion.</p> <p>13 A. Only from the standpoint that I provide</p> <p>14 information on the range of -- specifically within</p> <p>15 the region near Eagle Pass, I provide information on</p> <p>16 the extents and depths of the river.</p> <p>17 Q. (BY MR. STONE) So it's not accurate to say</p> <p>18 that you're going to provide information about water</p> <p>19 levels downstream of Amistad Dam as they relate to</p> <p>20 navigability for the entire stretch of the Rio Grande</p> <p>21 River?</p> <p>22 MR. HARRISON: Objection. Form.</p> <p>23 A. Only general statements.</p> <p>24 Q. (BY MR. STONE) Only general statements of</p> <p>25 information about water levels downstream of Amistad</p> |

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| <p>54</p> <p>1 Dam as they relate to navigability?</p> <p>2 MR. HARRISON: Objection. Form.</p> <p>3 A. In the sense that increased flow would raise</p> <p>4 water levels as a general statement.</p> <p>5 Q. (BY MR. STONE) So do you have to be an</p> <p>6 expert to know that increasing water levels --</p> <p>7 increasing flow, it could increase water levels?</p> <p>8 MR. HARRISON: Objection. Form. Calls</p> <p>9 for a legal conclusion.</p> <p>10 MR. STONE: Counsel, I'm going to ask</p> <p>11 you to stop stating the bases for your legal</p> <p>12 objections. In the Western District, where this case</p> <p>13 is, you can only object to form unless I ask</p> <p>14 otherwise.</p> <p>15 Q. (BY MR. STONE) Go ahead.</p> <p>16 A. Could you restate the question?</p> <p>17 Q. Yeah. Do you need a particular expertise to</p> <p>18 know that water levels rise if you release more water</p> <p>19 from the Amistad Dam?</p> <p>20 MR. HARRISON: Objection. Form.</p> <p>21 A. I don't believe so.</p> <p>22 Q. (BY MR. STONE) Other than that, do you have</p> <p>23 any other expert opin -- other than -- strike that.</p> <p>24 Other than your expert opinion that</p> <p>25 increasing more water from the Amistad Dam would</p> | <p>56</p> <p>1 okay? So just pause a beat.</p> <p>2 All right. Are you an expert on</p> <p>3 navigability?</p> <p>4 MR. HARRISON: Same objection.</p> <p>5 A. I am not.</p> <p>6 Q. (BY MR. STONE) Are you an expert --</p> <p>7 THE REPORTER: I'm sorry --</p> <p>8 THE WITNESS: I am not.</p> <p>9 THE REPORTER: -- did you say, "I am"?</p> <p>10 THE WITNESS: I am not.</p> <p>11 THE REPORTER: Thank you.</p> <p>12 Q. (BY MR. STONE) Are you an expert on</p> <p>13 navigability of the Rio Grande River?</p> <p>14 MR. HARRISON: Objection. Form.</p> <p>15 A. No.</p> <p>16 Q. (BY MR. STONE) Are you providing any expert</p> <p>17 opinions in this case on the subject of navigability?</p> <p>18 MR. HARRISON: Objection. Form.</p> <p>19 A. I provide information on how navigability is</p> <p>20 treated in the water treaty and then how it -- the</p> <p>21 document itself is flexible in the treatment of</p> <p>22 navigation, and then that it -- it does reference the</p> <p>23 navigation of the Rio Grande.</p> <p>24 Q. (BY MR. STONE) How many times does it</p> <p>25 reference navigation in the 1944 treaty?</p> |
| <p>55</p> <p>1 increase the water levels downstream, do you have any</p> <p>2 other expert opinions as it relates to the</p> <p>3 information about water levels downstream of Amistad</p> <p>4 Dam as these relate to navigability?</p> <p>5 MR. HARRISON: Objection. Form.</p> <p>6 A. As it says there, I'm providing information</p> <p>7 about that topic.</p> <p>8 Q. (BY MR. STONE) Is that factual information</p> <p>9 or expert opinion?</p> <p>10 MR. HARRISON: Objection. Form.</p> <p>11 A. I guess factual information.</p> <p>12 Q. (BY MR. STONE) What is -- it says here "as</p> <p>13 these relate to navigability." What is navigability?</p> <p>14 MR. HARRISON: Objection. Form.</p> <p>15 A. As I understand it, navigability would be</p> <p>16 the ability to have some sort of vessel on the water,</p> <p>17 moving its length and width.</p> <p>18 Q. (BY MR. STONE) Moving its length and width?</p> <p>19 A. Yes.</p> <p>20 Q. Are you an expert on navigability?</p> <p>21 A. I am --</p> <p>22 MR. HARRISON: Objection. Form.</p> <p>23 THE WITNESS: Sorry.</p> <p>24 Q. (BY MR. STONE) Yeah. Remember, just pause</p> <p>25 a beat. He's going to object to most questions,</p> | <p>57</p> <p>1 A. I could not give an exact count, but at --</p> <p>2 Q. Twice.</p> <p>3 A. -- least one.</p> <p>4 Q. Twice, right?</p> <p>5 MR. HARRISON: Objection. Form.</p> <p>6 A. I would want to verify, but that sounds</p> <p>7 accurate.</p> <p>8 Q. (BY MR. STONE) Is there a definition of</p> <p>9 "navigation" in the 1944 treaty?</p> <p>10 A. There is not.</p> <p>11 Q. Have you personally navigated up and down</p> <p>12 the Rio Grande River?</p> <p>13 A. I have --</p> <p>14 MR. HARRISON: Objection. Form.</p> <p>15 A. Sorry. The pauses are shorter than I</p> <p>16 expect. I have not.</p> <p>17 Q. (BY MR. STONE) Have you ever spoken to</p> <p>18 anybody who has navigated the entire stretch of the</p> <p>19 Rio Grande River?</p> <p>20 MR. HARRISON: Objection. Form.</p> <p>21 A. The entire stretch from the headwaters to</p> <p>22 the gulf, or the river?</p> <p>23 Q. (BY MR. STONE) Again, whenever I say, "Rio</p> <p>24 Grande River," unless I specify otherwise, I only</p> <p>25 mean river mile 275.5 to 610. So I'll tell you if I</p> |

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| <p>58</p> <p>1 mean anything -- whenever I say, "Rio Grande River"</p> <p>2 or "reach," if I mean anything other than that</p> <p>3 specific stretch, okay?</p> <p>4 A. Okay.</p> <p>5 Q. So let me ask it again. Have you spoken to</p> <p>6 anybody who has navigated the entire stretch of the</p> <p>7 Rio Grande River?</p> <p>8 MR. HARRISON: Same objection.</p> <p>9 A. I have not.</p> <p>10 Q. (BY MR. STONE) Are you aware of anyone who</p> <p>11 has navigated the entire stretch of the Rio Grande</p> <p>12 River?</p> <p>13 MR. HARRISON: Objection. Form.</p> <p>14 A. I'm aware of a reporter or somebody, a</p> <p>15 blogger, who did do that as part of his story or</p> <p>16 whatever he was writing in news.</p> <p>17 Q. (BY MR. STONE) Oh, which reporter?</p> <p>18 A. I couldn't recall his name. It's been</p> <p>19 several years.</p> <p>20 Q. Did you cite it in your expert report?</p> <p>21 A. No.</p> <p>22 Q. Did you rely on it in your expert report?</p> <p>23 A. Not at all.</p> <p>24 Q. Are you relying on it for your expert</p> <p>25 opinions?</p> | <p>60</p> <p>1 MR. HARRISON: Objection. Form.</p> <p>2 A. I have not.</p> <p>3 Q. (BY MR. STONE) Have you personally</p> <p>4 navigated from bank to bank across the Rio Grande</p> <p>5 River?</p> <p>6 MR. HARRISON: Objection. Form.</p> <p>7 A. I may have at some time in my his -- but I</p> <p>8 can't recall at this moment.</p> <p>9 Q. (BY MR. STONE) Have you spoken to anyone</p> <p>10 who has navigated from bank to bank across the Rio</p> <p>11 Grande River?</p> <p>12 MR. HARRISON: Objection. Form.</p> <p>13 A. Yes.</p> <p>14 Q. (BY MR. STONE) Who?</p> <p>15 A. Other employees at IBWC.</p> <p>16 Q. And when did they navigate from bank to bank</p> <p>17 across the Rio Grande River?</p> <p>18 MR. HARRISON: Objection. Form.</p> <p>19 A. It is a normal part of their job duties.</p> <p>20 Q. (BY MR. STONE) Did you rely on those</p> <p>21 conversations in any way in forming your opinions in</p> <p>22 this case?</p> <p>23 A. No.</p> <p>24 Q. What opinions do you have in this case about</p> <p>25 the navigability of the Rio Grande River?</p> |
| <p>59</p> <p>1 A. I am not.</p> <p>2 Q. So you can recall there was an article at</p> <p>3 some point that you read where a person, a reporter</p> <p>4 or a blogger, navigated the entire stretch of the Rio</p> <p>5 Grande River?</p> <p>6 MR. HARRISON: Objection. Form.</p> <p>7 A. That was the topic of his report, yes.</p> <p>8 Q. (BY MR. STONE) Do you remember what year</p> <p>9 you read that?</p> <p>10 A. I could not recall.</p> <p>11 Q. Do you remember anything about the subject</p> <p>12 of it so I could search for it? Like -- could you</p> <p>13 give me any details that might trigger a Google</p> <p>14 search that we would find it?</p> <p>15 MR. HARRISON: Objection. Form.</p> <p>16 A. I believe it was through The Texas Tribune,</p> <p>17 the newspaper.</p> <p>18 Q. (BY MR. STONE) Uh-huh.</p> <p>19 A. He started in the headwaters in this case</p> <p>20 and traveled to the gulf, and he was giving a report</p> <p>21 section by section of the river of his travels.</p> <p>22 Q. Other than that article that you can</p> <p>23 remember from some time ago, are you aware of anybody</p> <p>24 else who has navigated the entire stretch of the Rio</p> <p>25 Grande River?</p> | <p>61</p> <p>1 MR. HARRISON: Objection. Form.</p> <p>2 A. The only opinion I provide is that -- as</p> <p>3 relates to my report is that the treaty is flexible</p> <p>4 in its treatment of that topic, and the two</p> <p>5 governments could come to an agreement to prioritize</p> <p>6 or change how navigation is prioritized.</p> <p>7 Q. (BY MR. STONE) Are you aware of any goods</p> <p>8 or services -- strike that.</p> <p>9 Are you aware of any commercial goods or</p> <p>10 services that have been transported by navigation</p> <p>11 down the Rio Grande River?</p> <p>12 MR. HARRISON: Objection. Form.</p> <p>13 A. I would only be aware of, say, fishing that</p> <p>14 is done in the region. And whether or not that's</p> <p>15 used for commercials, like selling that fish or</p> <p>16 something like that, I could not speak to that.</p> <p>17 Q. (BY MR. STONE) Are fishing and hunting</p> <p>18 "navigation" under the 1944 treaty?</p> <p>19 MR. HARRISON: Objection. Form.</p> <p>20 A. I couldn't make a determination.</p> <p>21 Q. (BY MR. STONE) They're a separate category</p> <p>22 from navigation in the 1944 treaty, aren't they?</p> <p>23 MR. HARRISON: Objection. Form.</p> <p>24 A. They are, yes.</p> <p>25 Q. (BY MR. STONE) In fact, they're the</p> |

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| <p>62</p> <p>1 priority after navigation, right?</p> <p>2 A. I would have --</p> <p>3 MR. HARRISON: Objection. Form.</p> <p>4 A. I would have to reference the document to</p> <p>5 get the exact order.</p> <p>6 Q. (BY MR. STONE) Is it your understanding</p> <p>7 that hunting and fishing are considered navigation</p> <p>8 under the 1944 treaty?</p> <p>9 MR. HARRISON: Objection. Form.</p> <p>10 A. I could not make a determination if, say,</p> <p>11 commercial fishing falls under navigation or not.</p> <p>12 Q. (BY MR. STONE) Other than -- so is that</p> <p>13 fishing that you referenced -- is that recreational</p> <p>14 fishing or commercial fishing?</p> <p>15 A. I couldn't speak to what the individuals</p> <p>16 were doing.</p> <p>17 Q. So is it fair to say that you're not aware</p> <p>18 of any commercial goods or services being transported</p> <p>19 by navigation down the Rio Grande River?</p> <p>20 MR. HARRISON: Objection. Form.</p> <p>21 A. Yes.</p> <p>22 Q. (BY MR. STONE) Are you aware of any</p> <p>23 commercial goods or services that have been</p> <p>24 transported by navigation up the Rio Grande River?</p> <p>25 MR. HARRISON: Objection. Form.</p> | <p>64</p> <p>1 highway of commerce. But that's more of a</p> <p>2 philosophical thinking of it.</p> <p>3 Q. (BY MR. STONE) So the highway of commerce</p> <p>4 would be the water release and how it is distributed</p> <p>5 as the water goes down to the different individuals</p> <p>6 with their water rights for municipal and irrigation</p> <p>7 purposes?</p> <p>8 MR. HARRISON: Objection. Form.</p> <p>9 A. I could think of that, yes.</p> <p>10 Q. (BY MR. STONE) Okay. What are the water</p> <p>11 levels downstream of Amistad Dam as they relate to</p> <p>12 navigability?</p> <p>13 MR. HARRISON: Objection. Form.</p> <p>14 A. Okay. So in my report I provide information</p> <p>15 in water levels near Eagle Pass, Texas, with what</p> <p>16 would be considered a normal or a day-to-day normal,</p> <p>17 sunny-day water level and then compare it to the</p> <p>18 water levels that were experienced during Hurricane</p> <p>19 Alex.</p> <p>20 Q. (BY MR. STONE) When was Hurricane Alex?</p> <p>21 A. In 2010.</p> <p>22 Q. And what date was the -- strike that. We're</p> <p>23 going to come -- we'll talk about that gage.</p> <p>24 How many gages are there between Amistad</p> <p>25 Dam and Falcon Dam? You know what, strike that.</p> |
| <p>63</p> <p>1 A. I am not.</p> <p>2 Q. (BY MR. STONE) Would you describe the Rio</p> <p>3 Grande River as a highway of commerce?</p> <p>4 MR. HARRISON: Objection. Form.</p> <p>5 A. I wouldn't have a description of that. I</p> <p>6 guess -- no.</p> <p>7 Q. (BY MR. STONE) No? Sorry, we spoke at the</p> <p>8 same time.</p> <p>9 A. No.</p> <p>10 Q. Why not?</p> <p>11 MR. HARRISON: Objection. Form.</p> <p>12 A. It's not something I've thought about.</p> <p>13 Q. (BY MR. STONE) Well, let me give you a</p> <p>14 minute to think about it now.</p> <p>15 Why wouldn't you describe the Rio Grande</p> <p>16 River as a highway of commerce?</p> <p>17 MR. HARRISON: Objection. Form.</p> <p>18 A. So it depends on how you're thinking of the</p> <p>19 concept of highway of commerce, right? So as it</p> <p>20 relates to the release of water, water is money. It</p> <p>21 grows food. It grows agriculture. It grows cotton</p> <p>22 and all sorts of things, right?</p> <p>23 So from the sense that that water is</p> <p>24 used for supplying industries, municipalities, and</p> <p>25 various other uses of that water, in a sense, it is a</p> | <p>65</p> <p>1 Let's do the whole -- how many gages are there on the</p> <p>2 Rio Grande River?</p> <p>3 A. In your terminology of the Rio Grande...</p> <p>4 I would not be able to give a precise</p> <p>5 answer, but it's going to be several dozen.</p> <p>6 Q. Would you say at least 20?</p> <p>7 A. That seems like a reasonable count.</p> <p>8 Q. Okay. So I'm going to be referring to gages</p> <p>9 1 through 20, beginning with number 1, and that gage</p> <p>10 is going to be the closest to Amistad Dam, with 20</p> <p>11 being the furthest away. Do you understand?</p> <p>12 A. 1 through 20, okay.</p> <p>13 Q. Uh-huh. Where is the first gage?</p> <p>14 A. Oh, you want me to name the gages?</p> <p>15 Q. We're going through the 20 gages, yes.</p> <p>16 A. Oh.</p> <p>17 Q. So where is the first gage?</p> <p>18 A. Downstream of Amistad, the first gage would</p> <p>19 be below Amistad Dam.</p> <p>20 Q. What is the current depth of the water in</p> <p>21 the Rio Grande River at the first gage?</p> <p>22 A. I could not provide that information.</p> <p>23 Q. Is it possible to determine what the current</p> <p>24 depth of the water is in the Rio Grande River at the</p> <p>25 first gage?</p> |

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| <p>66</p> <p>1 A. It is, yes.</p> <p>2 Q. Could you have determined that in this case?</p> <p>3 A. The depth of the water at the gage is going</p> <p>4 to be changing minute by minute, so I could not give</p> <p>5 an accurate number at this very moment, because it is</p> <p>6 going to be -- I do not look at that data every hour</p> <p>7 or minute that it's transmitting.</p> <p>8 Q. I understand. Okay. Let me start again.</p> <p>9 What is the average depth of the water</p> <p>10 in the Rio Grande River at the first gage over the</p> <p>11 past year?</p> <p>12 MR. HARRISON: Objection. Form.</p> <p>13 A. I could not provide that information, since</p> <p>14 we publicly post that data. So I would use that as</p> <p>15 reference.</p> <p>16 Q. (BY MR. STONE) So it's -- the water depth</p> <p>17 of the -- strike that.</p> <p>18 So the current depth of the water in the</p> <p>19 Rio Grande River at the first gage, its average over</p> <p>20 the past year is publicly available on the -- on what</p> <p>21 web site?</p> <p>22 A. A data portal that's operated by the U.S.</p> <p>23 section of the Commission.</p> <p>24 And to clarify, the information that is</p> <p>25 posted is gage height or stage. Those are synonyms</p> | <p>68</p> <p>1 Q. (BY MR. STONE) So is it fair to say that I</p> <p>2 cannot, through the data portal operated by the U.S.</p> <p>3 section, determine the actual depth of the water at</p> <p>4 each gage on the Rio Grande River?</p> <p>5 MR. HARRISON: Objection. Form.</p> <p>6 A. The actual depth, not at this time, no.</p> <p>7 Q. (BY MR. STONE) And you said it's close, but</p> <p>8 you don't know how -- there's not a way for me to</p> <p>9 determine how close the water depth is to what the</p> <p>10 publicly available information is, right?</p> <p>11 MR. HARRISON: Objection. Form.</p> <p>12 A. Not using the portal or web site only.</p> <p>13 Q. (BY MR. STONE) How would I determine --</p> <p>14 strike that.</p> <p>15 How would you determine what the water</p> <p>16 depth is on average over the past year at the first</p> <p>17 gage?</p> <p>18 A. Okay. If I was going to make the</p> <p>19 determination, I would pull the field data that is</p> <p>20 collected, the most recent numbers for the period of</p> <p>21 time of interest, and then I would relate that to a</p> <p>22 water surface elevation, and using that</p> <p>23 cross-section, I could estimate a depth of the water.</p> <p>24 Q. You didn't do that in this case?</p> <p>25 A. I did not, no.</p> |
| <p>67</p> <p>1 for the same thing, which are the height of the water</p> <p>2 above a reference -- a fixed reference point. It is</p> <p>3 not exactly depth, but it would be very similar.</p> <p>4 Q. So it's not actually the depth of the water</p> <p>5 at the first gage, right?</p> <p>6 A. It would be a similar -- close, but not</p> <p>7 exact.</p> <p>8 Q. How close?</p> <p>9 A. It depends on the gage.</p> <p>10 Q. At the first gage?</p> <p>11 A. I couldn't tell you exactly.</p> <p>12 Q. The second gage?</p> <p>13 A. I couldn't tell you exactly.</p> <p>14 Q. How do we know how close it is at each of</p> <p>15 the gages?</p> <p>16 A. Oh, okay.</p> <p>17 MR. HARRISON: Objection. Form.</p> <p>18 A. Sorry. We collect that data on a 15-minute</p> <p>19 basis in terms of stage and gage height. Additional</p> <p>20 analysis would have to be conducted to get the depth.</p> <p>21 And if I was going to do that, I would use a recent</p> <p>22 calibration measurement, since it does collect</p> <p>23 cross-section data, and that would then give me an</p> <p>24 idea of where the current bottom of the river channel</p> <p>25 is.</p> | <p>69</p> <p>1 Q. Did you do that for any of the 20 gages in</p> <p>2 this case?</p> <p>3 MR. HARRISON: Objection. Form.</p> <p>4 A. I did not.</p> <p>5 Q. (BY MR. STONE) Did you determine -- strike</p> <p>6 that.</p> <p>7 How would you determine the average</p> <p>8 depth of the water in the Rio Grande River at the</p> <p>9 first gage over the past ten years?</p> <p>10 A. Okay. So for the past ten years -- we've</p> <p>11 been operating the Aquarius system since 2012, so we</p> <p>12 have a continuous record of gage heights in the</p> <p>13 database over that ten-year period that you</p> <p>14 reference. So, using that data, I would be able to</p> <p>15 get the average depths and then, using the</p> <p>16 cross-section information from our measurements, make</p> <p>17 a determination on depths that way.</p> <p>18 Q. So you could have made that determination in</p> <p>19 this case, right?</p> <p>20 A. With sufficient time, yes.</p> <p>21 Q. But you didn't, right?</p> <p>22 A. I didn't --</p> <p>23 MR. HARRISON: Object --</p> <p>24 A. -- no. Sorry.</p> <p>25 MR. HARRISON: Objection. Form.</p> |

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| <p>70</p> <p>1 Q. (BY MR. STONE) How much water would you 2 have to release from the Amistad Dam to increase the 3 depth of the water in the Rio Grande River at the 4 first gage to three feet? 5 MR. HARRISON: Objection. Form. 6 A. I could not answer that time without looking 7 at other files. 8 Q. (BY MR. STONE) And that's because you don't 9 even know what the depth is at the first gage, right? 10 MR. HARRISON: Objection. Form. 11 A. Not offhand. 12 Q. (BY MR. STONE) How would releasing water 13 from the Amistad Dam to increase the depth of the 14 water in the Rio Grande River at the first gage to 15 three feet impact existing water right allocations? 16 MR. HARRISON: Objection. Form. 17 A. The impact would be entirely based off who 18 is calling for that water. So if the -- Mexico 19 was -- had the goal to raise it by three feet and 20 they ordered that water, in order to do that, it 21 would impact their ownerships of waters. Same 22 with -- similar on the Texas side. It just depends. 23 Q. (BY MR. STONE) How much water would you 24 have to release from the Amistad Dam to increase the 25 depth of the water in the Rio Grande River at the</p> | <p>72</p> <p>1 depth of the water at that location to three feet? 2 MR. HARRISON: Objection. Form. 3 A. Not without additional analysis. 4 Q. (BY MR. STONE) Same question but for nine 5 feet. 6 MR. HARRISON: Objection. Form. 7 A. Not without additional analysis. 8 Q. (BY MR. STONE) And you didn't do any of 9 that analysis for the purposes of your expert 10 opinions today, right? 11 A. I did not, no. And when we get to a good 12 stopping point, if we could take a small break? 13 Q. Oh, yeah. Why don't we take a -- let's take 14 a break. Off the record. 15 THE VIDEOGRAPHER: It's 10:51 a.m. 16 We're off the record. 17 (Recess 10:51 a.m. to 11:02 a.m.) 18 THE VIDEOGRAPHER: The time is 19 11:02 a.m. We're back on the record. 20 MR. HARRISON: We object to the three 21 consulting experts being on this Zoom without them 22 being identified. Rule 30(b)(5)(A)(v) requires that 23 the identity of all persons present be identified for 24 the purposes of the deposition. And so for them to 25 participate, we would ask that you-all identify those</p> |
| <p>71</p> <p>1 first gage to three feet year-round? 2 MR. HARRISON: Objection. Form. 3 A. I would have to do additional analysis. 4 Q. (BY MR. STONE) You don't know? 5 A. Not at this moment. 6 Q. How much water would you have to release 7 from the Amistad Dam to increase the depth of the 8 water in the Rio Grande River at the first gage to 9 nine feet? 10 MR. HARRISON: Objection. Form. 11 A. Same answer: I would not know at this 12 moment. 13 Q. (BY MR. STONE) And is -- is it your 14 testimony that that same situation applies to all 20 15 gages in the Rio Grande River? 16 MR. HARRISON: Objection. Form. 17 A. In the sense that I am not -- at any given 18 moment, I would have to do additional analysis. It's 19 not information that I keep readily in my head at any 20 given moment. 21 Q. (BY MR. STONE) Sure. Let me ask it 22 differently. 23 Can you tell us, for any of the 20 gages 24 on the Rio Grande River, how much water you would 25 need to release from the Amistad Dam to increase the</p> | <p>73</p> <p>1 individuals. 2 MR. STONE: We will identify them 3 pursuant to the agreement that we have. In other 4 words, we will provide you with their identities as 5 required by the rules and by the scheduling order. 6 MR. HARRISON: But for purposes of a 7 deposition, their identity is required. You have to 8 pro -- those have to be provided now. 9 MR. STONE: Well, no, by -- for our 10 agreement, our agreement is that we're going to 11 disclose our experts to you -- yeah, unless the 12 parties stipulate otherwise. We have an agreement, 13 an agreed scheduling order, that says that we'll 14 disclose the identity of our experts to you on 15 June 7th. 16 MR. HARRISON: So -- 17 MR. STONE: And we will. We will 18 absolutely identify all of the individuals who are 19 attending on June 7th. 20 MR. HARRISON: It has nothing to do with 21 your expert identification. It has -- what it has to 22 do with is that the rule requires that individuals 23 participating in a deposition be identified as part 24 of the record in the deposition itself. And it's 25 complying with the rules so that we know who is</p> |

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| <p>74</p> <p>1 present at the deposition and so that you-all have it 2 and the court has it. 3 And so if "consulting expert" is the 4 only thing that comes up there, we object to it 5 because that's not consistent with the rules, and it 6 doesn't identify all persons present at the 7 deposition, regardless of whether they're 8 participating in the deposition or not. 9 MR. STONE: Slow down. We are going to 10 provide their identities. On June 7th we will 11 supplement and provide for this deposition transcript 12 the identities of all these individuals. So we will 13 provide it to you. It will be part of the deposition 14 transcript. All this information will be included in 15 the deposition transcript. 16 MR. HARRISON: I think our position is 17 that if they're not identified now, then they 18 can't -- they can't participate in the deposition 19 itself. And so if they don't want to choose to be 20 identified, then they need to leave -- they need to 21 leave the Zoom. 22 MR. STONE: My individuals are not 23 leaving the Zoom. They're entitled to be here right 24 now, and we're entitled to provide you with that 25 information on June 7th, as we agreed. We're going</p> | <p>76</p> <p>1 MR. HARRISON: Thank you. Thanks. 2 MR. STONE: Okay. 3 Q. (BY MR. STONE) All right. Now, you 4 testified a few minutes ago that you don't know what 5 the water levels downstream of the Amistad Dam are as 6 they relate to navigability, right? 7 MR. HARRISON: Objection. Form. 8 A. I do not know the water levels at this 9 current moment, correct. 10 Q. (BY MR. STONE) And you don't know the water 11 levels over the past year on average as they relate 12 to -- strike that. 13 You also don't know what the average 14 water levels are downstream of Amistad Dam as they 15 relate to navigability for all 20 gages? 16 MR. HARRISON: Objection. Form. 17 A. I do not have a -- at this moment I could 18 not give you that information, because additional 19 analysis would be required on my part. 20 Q. (BY MR. STONE) As it relates to the 21 determination of water levels downstream of the 22 Amistad Dam as they relate to navigability, are you 23 offering fact testimony or expert opinions about 24 those? 25 MR. HARRISON: Objection. Form.</p> |
| <p>75</p> <p>1 to give you their identities on June 7th. You're not 2 entitled to find out their identities prior to 3 June 7th. 4 Additionally -- I mean, this is just an 5 attempt to figure out who our experts are before 6 we're required to disclose them. We have such a 7 tight timeline here that it's important that my 8 experts be able to hear this testimony live because 9 we're on such a tight schedule. 10 You guys didn't give us any details. 11 You wouldn't even tell us what segment of the river 12 was at issue until two weeks ago. 13 So we are -- you know, we are clearly at 14 a disadvantage here, and it's important that my 15 experts be able to listen. And, again, we will 16 provide you with their identities and make sure that 17 it's part of the transcript for this hearing. 18 MR. HARRISON: Okay. So maybe the way 19 to move forward, then, is I would like to put on a 20 standing objection for their participation in this, 21 and we can confer afterwards and decide how to handle 22 this for future depositions. 23 MR. STONE: I think that makes sense. 24 We can have a conversation after this about how we 25 handle this going forward.</p> | <p>77</p> <p>1 A. My report is specifically focused on 2 providing the water levels at Eagle Pass. I do not 3 make any statements regarding to what flow would be 4 required to reach those water levels between those 5 elevations nor the other sections of the river that 6 I'm not covering in the report. 7 Q. (BY MR. STONE) So when it says here, 8 "information about water levels downstream of Amistad 9 Dam as" -- strike that. 10 Referring to Cortez Exhibit 4. So when 11 it says in Cortez Exhibit 4, "information about water 12 levels downstream of Amistad Dam as they relate to 13 navigability," you're only actually talking about the 14 gage that's in Eagle Pass, right? 15 MR. HARRISON: Objection. Form. 16 A. That is the only gage I reference in my 17 report. 18 Q. (BY MR. STONE) You're not talking about any 19 of the other gages on the Rio Grande River? 20 MR. HARRISON: Objection. Form. 21 A. I make reference to other gages as part of 22 the reports but not as it relates to navigability. 23 And to amend that statement for completeness, I do 24 reference the mile 13 Jimenez gages and the 25 operations there, which is upstream of Eagle Pass.</p> |

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| <p style="text-align: right;">78</p> <p>1 Q. (BY MR. STONE) So two gages that you</p> <p>2 mention --</p> <p>3 A. Uh-huh.</p> <p>4 Q. -- are both in Eagle Pass?</p> <p>5 A. They are upstream of Eagle Pass, but</p> <p>6 relatively close.</p> <p>7 Q. How far upstream of Eagle Pass?</p> <p>8 A. I would need to look at my report to get the</p> <p>9 river mileages.</p> <p>10 Q. Well, we'll be going through your report</p> <p>11 shortly, so we'll wait and go through that then.</p> <p>12 What opinions do you have about the</p> <p>13 water levels downstream of the Amistad Dam as they</p> <p>14 relate to navigability at the Eagle Pass gage?</p> <p>15 MR. HARRISON: Objection. Form.</p> <p>16 A. I do not offer any opinions on that topic.</p> <p>17 Q. (BY MR. STONE) A moment ago you mentioned</p> <p>18 the other gage that you discuss -- which one was it</p> <p>19 again?</p> <p>20 A. Rio Grande at Jimenez.</p> <p>21 Q. Jimenez. What expert opinion do you have</p> <p>22 about the water levels downstream of Amistad Dam as</p> <p>23 they relate to navigability at the Jimenez gage?</p> <p>24 MR. HARRISON: Objection. Form.</p> <p>25 A. Only that the reduced water levels at the</p> | <p style="text-align: right;">80</p> <p>1 about that subject?</p> <p>2 A. Not opinions; I'm providing information.</p> <p>3 Q. Okay. Do you have -- strike that.</p> <p>4 Are you an expert on the Commission's</p> <p>5 use of watercraft in support of its operations on the</p> <p>6 Rio Grande River?</p> <p>7 MR. HARRISON: Objection. Form.</p> <p>8 A. I'm knowledgeable in my daily duties of the</p> <p>9 type of instruments that we use for collecting data</p> <p>10 within our division.</p> <p>11 Q. (BY MR. STONE) So is that a yes?</p> <p>12 MR. HARRISON: Objection. Form.</p> <p>13 A. Specific to as it relates to my job duties,</p> <p>14 yes.</p> <p>15 Q. (BY MR. STONE) Other than as it relates to</p> <p>16 your job duties, are you an expert on the IBW -- on</p> <p>17 the Commission's use of watercraft in support of its</p> <p>18 operations on the Rio Grande River?</p> <p>19 MR. HARRISON: Objection. Form.</p> <p>20 A. No.</p> <p>21 Q. (BY MR. STONE) Will you be providing expert</p> <p>22 opinions in this case on the Commission's use of</p> <p>23 watercraft in support of its operations on the Rio</p> <p>24 Grande River?</p> <p>25 MR. HARRISON: Objection. Form.</p> |
| <p style="text-align: right;">79</p> <p>1 Jimenez gage reduces -- the reduced water flows at</p> <p>2 the Jimenez gage reduces water levels. So depending</p> <p>3 on how far it's reduced, that would have an impact on</p> <p>4 navigability.</p> <p>5 Q. (BY MR. STONE) Next on Exhibit 4, the final</p> <p>6 category that we've got listed here, it says that</p> <p>7 "USIBWC's use of watercraft in support of its</p> <p>8 operations on the Rio Grande." Do you see that?</p> <p>9 A. I see that, yes.</p> <p>10 Q. Are you an expert on the IBWC's use of</p> <p>11 watercraft in support of its operations on the Rio</p> <p>12 Grande River?</p> <p>13 MR. HARRISON: Objection. Form.</p> <p>14 A. I am not an expert in the deployment of</p> <p>15 watercraft on the Rio Grande River.</p> <p>16 Q. (BY MR. STONE) I think I understand. So is</p> <p>17 it your testimony that you're not an expert on</p> <p>18 watercraft on the Rio Grande River, period, not just</p> <p>19 specifically to the operations of IBWC?</p> <p>20 MR. HARRISON: Objection. Form.</p> <p>21 A. The testimony that I'm offering is relating</p> <p>22 to the equipment that the Commission deploys and the</p> <p>23 type of equipment they would use on the river -- Rio</p> <p>24 Grande in general.</p> <p>25 Q. (BY MR. STONE) So you have expert opinions</p> | <p style="text-align: right;">81</p> <p>1 A. I provide information on the type of</p> <p>2 watercraft that we use.</p> <p>3 Q. (BY MR. STONE) Is that fact testimony, or</p> <p>4 is it expert opinion testimony?</p> <p>5 A. It is fact testimony.</p> <p>6 MR. HARRISON: Objection. Form.</p> <p>7 A. It is fact testimony.</p> <p>8 Q. (BY MR. STONE) Do you have any expert</p> <p>9 opinions in this case about the Commission's use of</p> <p>10 watercraft in support of its operations on the Rio</p> <p>11 Grande River?</p> <p>12 A. I do not.</p> <p>13 Q. Other than the -- other than the topics that</p> <p>14 are identified here on Exhibit 4, is there anything</p> <p>15 else that you will be testifying as an expert on in</p> <p>16 this case?</p> <p>17 MR. HARRISON: Objection. Form.</p> <p>18 A. I believe what is written there is accurate.</p> <p>19 Q. (BY MR. STONE) Okay. I want to go back to</p> <p>20 Exhibit 5. This is the -- Cortez Exhibit 5, this is</p> <p>21 the table of river mileages. I'm looking at page 4</p> <p>22 where we started with that mile at 275.5, right?</p> <p>23 Do you see -- I haven't shared the</p> <p>24 screen. Hold on.</p> <p>25 Okay. Do you see it on your screen?</p> |

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| <p style="text-align: right;">82</p> <p>1 A. I do see it, yes.</p> <p>2 Q. Do you know where each of these buoys is</p> <p>3 located?</p> <p>4 A. Beyond the river mileage information that's</p> <p>5 provided here?</p> <p>6 Q. Yeah.</p> <p>7 A. No. This would be where the buoys are</p> <p>8 located if they're currently installed and operable.</p> <p>9 Q. What are these Falcon Buoys?</p> <p>10 A. They demark the international boundary in</p> <p>11 the reservoir itself.</p> <p>12 Q. You mentioned that you collect</p> <p>13 cross-sectional data at the gages. Is that correct?</p> <p>14 A. As part of my division's duties, that is</p> <p>15 data we collect.</p> <p>16 Q. How often do you collect cross-sectional</p> <p>17 data at the gages along the Rio Grande River?</p> <p>18 A. So every time one of our technicians</p> <p>19 performs a field measurement, there is a</p> <p>20 cross-section that is collected in order to do that.</p> <p>21 It depends on the exact gage that we are looking at,</p> <p>22 but at least once a month would be the routine.</p> <p>23 Q. And do you guys retain that information in</p> <p>24 written format at the IBWC?</p> <p>25 A. Not written, but digital files.</p> | <p style="text-align: right;">84</p> <p>1 buoys called the Falcon Buoys, where are they in</p> <p>2 ref -- located in reference to the riverbanks?</p> <p>3 A. The -- so that's a complicated question in</p> <p>4 the sense that the reservoir is inundated, right? So</p> <p>5 as it fills up, the extent of the reservoir is going</p> <p>6 to increase, and that's going to -- there's not</p> <p>7 really a riverbank anymore, because you have a full</p> <p>8 inundation pool, if you're talking about what the</p> <p>9 original elevation of the river was and its prior --</p> <p>10 prior to the construction of the dam or the current</p> <p>11 extent of the dam.</p> <p>12 Q. Yeah. And this is a great time to do some</p> <p>13 terms, talk about some terms.</p> <p>14 What do you mean when you say the word</p> <p>15 "inundate"?</p> <p>16 A. Inundate. So that is the pool of water that</p> <p>17 is formed by Falcon Dam and Amistad Dam.</p> <p>18 Q. Is that where the reservoirs are located, or</p> <p>19 is it a different location?</p> <p>20 A. It is the same location, yes.</p> <p>21 Q. Are the -- those Falcon Buoys that are</p> <p>22 referenced in Exhibit 5, are they located on the U.S.</p> <p>23 or Mexico side of the reservoir?</p> <p>24 A. They would be located on the international</p> <p>25 boundary.</p> |
| <p style="text-align: right;">83</p> <p>1 Q. Digital files, okay. Did you rely on any of</p> <p>2 that information in forming your expert opinions in</p> <p>3 this case?</p> <p>4 A. I did not.</p> <p>5 Q. Are any of the buoys identified in Exhibit 5</p> <p>6 located in -- located where the buoys at issue in</p> <p>7 this case that were installed by Texas are?</p> <p>8 MR. HARRISON: Objection. Form.</p> <p>9 A. I do not believe so, no.</p> <p>10 Q. (BY MR. STONE) For the purposes of this</p> <p>11 deposition, and so I don't have to use a bunch of</p> <p>12 words to explain it, when I say "floating buoys," I'm</p> <p>13 going to be specifically referencing the buoys that</p> <p>14 were installed by Texas that are at issue in this</p> <p>15 case. Do you understand?</p> <p>16 A. Yes.</p> <p>17 Q. Have you seen the buoys that are identified</p> <p>18 in Exhibit 5 along the stretch at issue here of the</p> <p>19 Rio Grande River?</p> <p>20 A. Those specifically named "Falcon Buoy No."</p> <p>21 something?</p> <p>22 Q. Uh-huh.</p> <p>23 A. I have seen photos of them, but that's the</p> <p>24 only time.</p> <p>25 Q. Do you know where those buoys are -- those</p> | <p style="text-align: right;">85</p> <p>1 Q. And you said that it's complicated because</p> <p>2 the river is inundated right now in determining where</p> <p>3 they are in relation to the riverbank, which there is</p> <p>4 no riverbank?</p> <p>5 MR. HARRISON: Objection. Form.</p> <p>6 MR. STONE: Strike that. Even I was</p> <p>7 confused by it. Terrible question. All right.</p> <p>8 Q. (BY MR. STONE) Who owns or controls those</p> <p>9 buoys?</p> <p>10 MR. HARRISON: Objection. Form.</p> <p>11 A. For the buoys that are specifically</p> <p>12 referenced as Falcon Buoy, my understanding is that</p> <p>13 those are maintained by the Commission as part of its</p> <p>14 jurisdiction.</p> <p>15 Q. (BY MR. STONE) Do you know if a Section 10</p> <p>16 permit was issued by the U.S. Army Corps of Engineers</p> <p>17 for those buoys?</p> <p>18 MR. HARRISON: Objection. Form.</p> <p>19 A. I don't have any knowledge of that.</p> <p>20 Q. (BY MR. STONE) Are you -- have you reviewed</p> <p>21 the Rivers and Harbors Act of 1899?</p> <p>22 A. I have not.</p> <p>23 Q. Let's switch over and talk about your expert</p> <p>24 report.</p> <p>25 Do you see Cortez Exhibit 2 on the</p> |

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| <p>86</p> <p>1 screen?</p> <p>2 A. I do.</p> <p>3 Q. This is your supp -- this is your current</p> <p>4 expert report?</p> <p>5 A. Yes, that's what it appears to be.</p> <p>6 Q. I want to start on page 3 under Section 1,</p> <p>7 Purpose and Need. Could you read the first paragraph</p> <p>8 here silently to yourself and then let me know when</p> <p>9 you finish. I have some follow-up questions.</p> <p>10 A. Could I look at a paper version?</p> <p>11 MR. HARRISON: I have a paper version</p> <p>12 printed off here.</p> <p>13 MR. STONE: Yeah, if you want.</p> <p>14 MR. HARRISON: All that's written on it</p> <p>15 is Cortez 2.</p> <p>16 MR. STONE: Perfect, yeah.</p> <p>17 THE WITNESS: Thank you so much.</p> <p>18 A. (Reading.) Okay.</p> <p>19 Q. (BY MR. STONE) When were you asked to</p> <p>20 provide expert opinions about the information</p> <p>21 described in paragraph 1?</p> <p>22 A. I want to roughly say it was February,</p> <p>23 March, that time period, but I could be wrong.</p> <p>24 Q. It was before May 3rd?</p> <p>25 A. Before submittal of the report?</p> | <p>88</p> <p>1 Q. And possibly before January 24th, 2024?</p> <p>2 MR. HARRISON: Objection. Form.</p> <p>3 A. It's unlikely, but it is possible.</p> <p>4 Q. (BY MR. STONE) Were you asked to provide</p> <p>5 expert opinions on the River and Harbors Act of 1899?</p> <p>6 A. I was not.</p> <p>7 Q. All right. Do you have any expert opinions</p> <p>8 on the River and Harbors Act?</p> <p>9 A. I do not.</p> <p>10 Q. Are you a lawyer?</p> <p>11 A. I am not.</p> <p>12 Q. Did you attend law school?</p> <p>13 A. I did not.</p> <p>14 Q. Are you offering any legal opinions on the</p> <p>15 1944 Water Treaty?</p> <p>16 A. I am not.</p> <p>17 Q. Does the 1944 Water Treaty define</p> <p>18 "navigation"?</p> <p>19 A. It does not.</p> <p>20 Q. How did dictionaries define the word</p> <p>21 "navigation" in 1944 when the water treaty was</p> <p>22 adopted?</p> <p>23 MR. HARRISON: Objection. Form.</p> <p>24 A. I couldn't provide that information.</p> <p>25 Q. (BY MR. STONE) What specialized knowledge</p> |
| <p>87</p> <p>1 Q. No, no. Were you asked to provide the</p> <p>2 information described in paragraph 1 before May 3rd,</p> <p>3 2024?</p> <p>4 A. Yes, I was -- yes.</p> <p>5 Q. Were you asked to provide the information</p> <p>6 described in paragraph 1 before January 24th, 2024?</p> <p>7 A. I don't believe so, but my calendar is</p> <p>8 fuzzy.</p> <p>9 Q. Let's look at the second paragraph here on</p> <p>10 page 3 of Exhibit 2, Cortez Exhibit 2.</p> <p>11 "I have been asked to provide an opinion</p> <p>12 on how the 1944 Water Treaty addresses the subject of</p> <p>13 navigation, current navigational uses of the Rio</p> <p>14 Grande within the responsibility of the Commission,</p> <p>15 and how this could be prioritized in the future</p> <p>16 within the stretch of the river extending from</p> <p>17 Amistad International Dam to Falcon International Dam</p> <p>18 and Reservoir." Did I read that correctly?</p> <p>19 A. I believe so, yes.</p> <p>20 Q. When were you asked to provide that</p> <p>21 information?</p> <p>22 A. A similar time period as when I was first</p> <p>23 asked to go through the report.</p> <p>24 Q. Before May 3rd, 2024, right?</p> <p>25 A. Before May 3rd. That is correct.</p> | <p>89</p> <p>1 do you have on the definition of "navigation" in the</p> <p>2 1944 Water Treaty?</p> <p>3 A. Specialized knowledge? Nothing. Just what</p> <p>4 it says in the treaty.</p> <p>5 Q. What specialized skills do you have as it</p> <p>6 relates to the definition of "navigation" in the 1944</p> <p>7 Water Treaty?</p> <p>8 A. None.</p> <p>9 Q. What specialized experience do you have as</p> <p>10 it relates to the definition of "navigation" in the</p> <p>11 1944 Water Treaty?</p> <p>12 MR. HARRISON: Objection. Form.</p> <p>13 A. None.</p> <p>14 Q. (BY MR. STONE) What specialized training do</p> <p>15 you have on the definition of "navigation" in the</p> <p>16 1944 Water Treaty?</p> <p>17 MR. HARRISON: Objection. Form.</p> <p>18 A. None.</p> <p>19 Q. (BY MR. STONE) What specialized education</p> <p>20 do you have on the definition of "navigation" in the</p> <p>21 1944 Water Treaty?</p> <p>22 MR. HARRISON: Objection. Form.</p> <p>23 A. None.</p> <p>24 Q. (BY MR. STONE) Are you an expert on the</p> <p>25 subject of navigation in the 1944 Water Treaty?</p> |

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| <p>90</p> <p>1 MR. HARRISON: Objection. Form.</p> <p>2 A. I am not.</p> <p>3 Q. (BY MR. STONE) Are you an expert on current</p> <p>4 navigational uses of the Rio Grande within the</p> <p>5 responsibility of the Commission?</p> <p>6 MR. HARRISON: Objection. Form.</p> <p>7 A. I provide information on the watercraft that</p> <p>8 are used by the Commission in doing its duties.</p> <p>9 Q. (BY MR. STONE) Is that factual information</p> <p>10 or expert opinion?</p> <p>11 MR. HARRISON: Objection. Form.</p> <p>12 A. Just factual information.</p> <p>13 Q. (BY MR. STONE) Do you have any expert</p> <p>14 opinions on the current navigational uses of the Rio</p> <p>15 Grande within the responsibility of the Commission?</p> <p>16 A. Say the question again. Sorry. I was</p> <p>17 reading the...</p> <p>18 Q. Yeah. Do you have any expert opinions in</p> <p>19 this case on the current navigational uses of the Rio</p> <p>20 Grande within the responsibility of the Commission?</p> <p>21 A. No. I provide information about our uses.</p> <p>22 Q. Just factual information?</p> <p>23 A. Yes.</p> <p>24 Q. Do you have any expert opinions in this case</p> <p>25 on how this could be prioritized in the future within</p> | <p>92</p> <p>1 water for the purposes of navigation after 1944?</p> <p>2 MR. HARRISON: Objection. Form.</p> <p>3 A. The dam was constructed in '68, but in</p> <p>4 general, I'm not aware in my knowledge of that.</p> <p>5 Q. (BY MR. STONE) So it's fair to say that you</p> <p>6 have no knowledge of the Amistad Dam ever releasing</p> <p>7 water for the purposes of navigation?</p> <p>8 MR. HARRISON: Objection. Form.</p> <p>9 A. Not to my knowledge.</p> <p>10 Q. (BY MR. STONE) Are you aware of the Falcon</p> <p>11 Dam ever releasing water for the purposes of</p> <p>12 navigation?</p> <p>13 MR. HARRISON: Objection. Form.</p> <p>14 A. Again, not to my knowledge.</p> <p>15 Q. (BY MR. STONE) Would you know if the Falcon</p> <p>16 Dam released water for the purposes of navigation?</p> <p>17 A. If it happened in the future, I would be</p> <p>18 aware of it, yes.</p> <p>19 Q. What about since you have been employed by</p> <p>20 the IBWC?</p> <p>21 A. I am not aware of any instances.</p> <p>22 Q. Right. But would you be aware? Since</p> <p>23 you've been employed by the IBWC, would you be aware</p> <p>24 if the Falcon Dam released water for the purposes of</p> <p>25 navigation?</p> |
| <p>91</p> <p>1 the stretch of the river -- strike that. It's</p> <p>2 wordier than -- let me do it shorter.</p> <p>3 Do you have any expert opinions in this</p> <p>4 case on how this could be prioritized in the future</p> <p>5 along the Rio Grande River?</p> <p>6 MR. HARRISON: Objection. Form.</p> <p>7 A. I provide information on how the treaty is</p> <p>8 flexible in its application of uses, which navigation</p> <p>9 is one of the uses that is contemplated by the</p> <p>10 treaty.</p> <p>11 Q. (BY MR. STONE) Is that factual information</p> <p>12 or expert opinion?</p> <p>13 MR. HARRISON: Objection. Form.</p> <p>14 A. It would be factual information.</p> <p>15 Q. (BY MR. STONE) How many times has the</p> <p>16 Amistad Dam released water for the purposes of</p> <p>17 navigation since the adoption of the 1944 Water</p> <p>18 Treaty?</p> <p>19 MR. HARRISON: Objection. Form.</p> <p>20 A. I couldn't provide that information. Not to</p> <p>21 my knowledge.</p> <p>22 Q. (BY MR. STONE) So you gave two different</p> <p>23 answers there. Let me parse that.</p> <p>24 Do you not know, or you're not aware of</p> <p>25 it ever happening, that the Amistad Dam released</p> | <p>93</p> <p>1 A. I believe I would be aware.</p> <p>2 Q. And to the best of your knowledge, has the</p> <p>3 Falcon Dam, since you've been at the IBWC, ever</p> <p>4 released water for the purposes of navigation?</p> <p>5 A. Not to my knowledge.</p> <p>6 Q. Since you've been at the -- so similar line</p> <p>7 of questioning. Since you've been at the IBWC, would</p> <p>8 you be aware if the Amistad Dam released water for</p> <p>9 navigation?</p> <p>10 A. I would be aware.</p> <p>11 Q. Since you've been employed by the IBWC, are</p> <p>12 you aware of the Amistad Dam ever releasing water for</p> <p>13 the purposes of navigation?</p> <p>14 A. Not to my knowledge.</p> <p>15 Q. Has there ever been a request for the</p> <p>16 Amistad Dam to release water for the purposes of</p> <p>17 navigation?</p> <p>18 A. Not to my knowledge.</p> <p>19 Q. Hypothetically, how would a request for the</p> <p>20 Amistad Dam to release water for the purposes of</p> <p>21 navigation occur?</p> <p>22 MR. HARRISON: Objection. Form.</p> <p>23 A. Speaking purely hypothetically, assuming</p> <p>24 that the release was made consistent with the current</p> <p>25 operating rules and guidelines that are identified in</p> |

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| <p style="text-align: right;">94</p> <p>1 minutes and treaty, then whoever owns the water could 2 make a release or request a release from the dams for 3 that purpose, if it meets the current operating 4 standards. 5 If -- something would have to be changed 6 in Article -- in Article 3 of the '94 [sic] Water 7 Treaty. Then the two governments, through the 8 Commission, could come to a different agreement for 9 the prioritization of water. 10 Q. (BY MR. STONE) Would a water right be 11 required for the TCEQ watermaster to release water 12 for navigation? 13 MR. HARRISON: Objection. Form. 14 Q. (BY MR. STONE) Wait. Before you answer. 15 MR. STONE: State your objection. 16 MR. HARRISON: You said "water right." 17 Vague. 18 Q. (BY MR. STONE) Okay. What is a water 19 right? 20 A. So a water right is -- it's the right of an 21 individual predominantly for a sum of water. So if I 22 own a farm or something like that, I may have, you 23 know, ten acre-feet that I'm allocated or allowed to 24 use in order to do my business. Similarly, a 25 municipality may have a water right for drinking</p> | <p style="text-align: right;">96</p> <p>1 A. Navigation as beneficial use. I am not 2 aware, which isn't to say it doesn't exist. 3 THE REPORTER: I'm sorry, that last part 4 that you said? 5 THE WITNESS: I am not aware, not to say 6 it doesn't exist somewhere within Texas. 7 Q. (BY MR. STONE) Okay. I'm not asking 8 specifically about Texas, so maybe I should clarify. 9 Are you aware if TCEQ has granted any 10 water rights on the Rio Grande River for navigation 11 as a beneficial use? 12 A. Not to my knowledge. 13 Q. Would you be -- would you know if TCEQ 14 granted a water right for navigation on the Rio 15 Grande River? 16 A. It may be something that comes along for my 17 job duties from the standpoint that we have to 18 account for all the puts and takes in the reservoirs 19 and the stream -- river itself. So from that extent, 20 we may -- I may have that knowledge, if it were 21 right, because we would have to account for it in our 22 operations. 23 Q. So you would probably know if TCEQ had 24 issued a water right on the Rio Grande River for 25 navigation as a beneficial use?</p> |
| <p style="text-align: right;">95</p> <p>1 water purposes or industries. 2 Q. Would a water right be required for the 3 watermaster to release water for navigation? 4 A. And you're specifying the Texas watermaster? 5 Q. Sure. Let me ask it again with the TCEQ. 6 Wait. Let me pause there. 7 Is there -- on the Mexico side, is there 8 also a watermaster? 9 A. It's possible. I'm just familiar with the 10 agencies, but they may have someone who has a similar 11 title. 12 Q. I see. Would a water right be required for 13 the TCEQ watermaster to release water for navigation? 14 A. Any release from the dam is being requested 15 by the watermaster when we're talking solely about 16 the United States' portion of it. 17 Q. Uh-huh. 18 A. So then it would be, in that case, the 19 determination of Texas Administrative Code on how the 20 water rights are used, allocated, and their uses. 21 Q. Are you aware of any water rights for 22 navigation being issued ever in Texas? 23 A. I'm not aware, no. 24 Q. Are you aware if TCEQ has granted any water 25 rights for navigation as a beneficial use?</p> | <p style="text-align: right;">97</p> <p>1 A. It is likely, because we would be aware of 2 water rights in general and their placement. 3 Q. Are fishing and hunting considered 4 navigation by the 1944 treaty? 5 A. Within the scope of the 1944 Water Treaty, 6 they list that as priority 6 in Article 3. 7 Q. So they list it -- 8 A. Separately. 9 Q. Does the 1944 Water Treaty consider bank-to- 10 bank crossings of the Rio Grande River to be 11 navigation? 12 A. In 1944 Water Treaty does not provide a 13 definition of "navigation" or "navigability." 14 Q. Does the 1944 Water Treaty definition -- 15 strike that. 16 Does the 1944 Water Treaty consider 17 navigation to include only commercial activity on the 18 Rio Grande River? 19 MR. HARRISON: Objection. Form. 20 A. It does not specify a definition for what... 21 Q. (BY MR. STONE) Is there any commercial 22 navigation taking place on the Rio Grande River, to 23 the best of your knowledge? 24 A. Not to my knowledge. 25 Q. Does the 1944 Water Treaty consider</p> |

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| <p>98</p> <p>1 recreational activity on the Rio Grande River to be 2 navigation?</p> <p>3 A. I could not make a determination on what the 4 1944 Water Treaty determines each individual thing 5 would be other than if it's made a determination that 6 falls under those priorities.</p> <p>7 Q. Does the 1944 Water Treaty consider 8 navigation to include the illegal crossing of drugs 9 from Mexico into the United States?</p> <p>10 MR. HARRISON: Objection. Form.</p> <p>11 A. I couldn't make that determination.</p> <p>12 Q. (BY MR. STONE) So it's possible?</p> <p>13 MR. HARRISON: Objection. Form.</p> <p>14 A. In -- I couldn't provide a legal 15 determination what's -- whether or not that is 16 considered, but...</p> <p>17 Since the treaty itself does not 18 specifically define "navigation," right, you could 19 have a large subset of items that fall under that 20 thing that's silent within the treaty itself.</p> <p>21 Q. (BY MR. STONE) So is it fair to say that 22 because the 1944 treaty doesn't define "navigation," 23 it could be anything?</p> <p>24 MR. HARRISON: Objection. Form.</p> <p>25 A. As far as what is determined by the</p> | <p>100</p> <p>1 Q. Have the governments determined what 2 activity constitutes navigation for the purposes of 3 the 1944 treaty?</p> <p>4 A. Not to my knowledge, or it's not in my job 5 duties.</p> <p>6 Q. So is it your testimony that the Commission 7 could determine that navigation under the 1944 Water 8 Treaty includes the illegal crossing of drugs into 9 the United States?</p> <p>10 MR. HARRISON: Objection. Form.</p> <p>11 A. That would be a determination made by the 12 governments.</p> <p>13 Q. (BY MR. STONE) Not the Commission?</p> <p>14 MR. HARRISON: Same objection.</p> <p>15 A. So it's through agreements of the Commission 16 that that would be determined, and those are approved 17 by the governments.</p> <p>18 Q. (BY MR. STONE) Are there any agreements 19 right now between the governments as it relates to 20 navigation under the 1944 treaty?</p> <p>21 A. Not to my knowledge.</p> <p>22 Q. Do you know why the governments have not 23 come to any kind of agreement as it relates to 24 navigation of the 1944 treaty?</p> <p>25 A. I couldn't speculate.</p> |
| <p>99</p> <p>1 Commission and then also determined by the two 2 governments through our processes.</p> <p>3 Q. (BY MR. STONE) So there's two processes, 4 you said. One was determined by the Commission or 5 determined by the governments. Is that correct; 6 there's two pathways here?</p> <p>7 A. Yes, in the sense that the determinations by 8 the Commission are usually approved by the 9 governments in the forms of minutes and things like 10 that as well as the amendment that is listed in 11 Article 3 of the -- if the Commission needed to 12 change something or adjust the priorities.</p> <p>13 Q. Okay. Has the Commission approved -- strike 14 that.</p> <p>15 Has the Commission defined "navigation" 16 for the purposes of the 1944 treaty?</p> <p>17 A. Not to my knowledge.</p> <p>18 Q. Has the governments defined "navigation" for 19 the purposes of the 1944 treaty?</p> <p>20 A. Not to my knowledge. It's not part of my 21 duties.</p> <p>22 Q. Has this Commission determined what activity 23 constitutes navigation for the purposes of the 1944 24 treaty?</p> <p>25 A. Not to my knowledge.</p> | <p>101</p> <p>1 Q. I'm not asking you to speculate; I'm asking 2 if you know.</p> <p>3 A. I do not know.</p> <p>4 Q. Okay. The watermaster reports monthly on 5 all water uses by Texas on the Rio Grande River, 6 right?</p> <p>7 A. Yes, they make a determination monthly.</p> <p>8 Q. It's required by the IBWC accounting, right?</p> <p>9 A. Okay. Could you restate your full --</p> <p>10 Q. Sure.</p> <p>11 A. -- question?</p> <p>12 Q. The TCEQ watermaster's monthly reports on 13 water uses, is that required by IBWC accounting?</p> <p>14 A. In order for us to perform the accounting, 15 we do have to know the releases out of the dams, who 16 owns or requests those releases, and then similarly, 17 to perform the monthly accounting, we would have to 18 know how much was being diverted by the TCEQ 19 watermaster, stakeholders, or the accounts under the 20 watermaster.</p> <p>21 Q. Has TCEQ ever reported any water used for 22 navigation on the Rio Grande River?</p> <p>23 A. Not to my knowledge.</p> <p>24 Q. Does navigation -- under the 1944 treaty, 25 water -- strike that.</p> |

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| <p style="text-align: right;">102</p> <p>1 Under the 1944 Water Treaty, does</p> <p>2 navigation include illicit -- the transfer of illicit</p> <p>3 cargo?</p> <p>4 MR. HARRISON: Objection. Form.</p> <p>5 A. Say that again.</p> <p>6 Q. (BY MR. STONE) Sure. Under the 1944 Water</p> <p>7 Treaty, does the definition of "navigation" include</p> <p>8 the transfer of illicit cargo?</p> <p>9 MR. HARRISON: Same objection.</p> <p>10 A. The treaty does not provide a definition for</p> <p>11 navigation.</p> <p>12 Q. (BY MR. STONE) And is it your testimony</p> <p>13 that a determination of what navigation means under</p> <p>14 the 1944 treaty would be made either by the</p> <p>15 Commission or by the governments cooperating jointly?</p> <p>16 A. The Commission solely, I don't believe,</p> <p>17 would make the determination with respect to</p> <p>18 navigation; it would be with consultation of both</p> <p>19 governments.</p> <p>20 Q. Okay. So -- strike that.</p> <p>21 All right. I want to keep going. We</p> <p>22 are on page 3 of Exhibit 2. If you want to use the</p> <p>23 paper copy in front of you, it might be easier for</p> <p>24 you.</p> <p>25 Let's pick up under Section 2. So the</p> | <p style="text-align: right;">104</p> <p>1 water supply, as it determines the available water</p> <p>2 supply, in order to use that water for any use,</p> <p>3 regardless of navigation or municipal use or things</p> <p>4 like that.</p> <p>5 Q. How long have these drought-like conditions</p> <p>6 existed?</p> <p>7 A. The drought started in the mid to late</p> <p>8 1990s. Has a little -- couple years that were pretty</p> <p>9 good, and then we're back in it.</p> <p>10 Q. Do you have any reason to believe that in</p> <p>11 the near-term future, those drought conditions will</p> <p>12 cease to exist?</p> <p>13 MR. HARRISON: Objection. Form.</p> <p>14 A. I couldn't make a determination on climate</p> <p>15 and weather as it relates to long-term periods.</p> <p>16 Q. (BY MR. STONE) You also talk about here the</p> <p>17 infrastructure constructed upstream. How is that a</p> <p>18 limiting factor?</p> <p>19 A. Okay. So the construction upstream -- every</p> <p>20 drop of the water in the Rio Grande basin at this</p> <p>21 point is allocated to somebody. So as I say in my</p> <p>22 report, the way the basin is managed is that the</p> <p>23 region upstream of El Paso, Texas, is sort of its own</p> <p>24 river. And the infrastructure there is operated to</p> <p>25 provide, you know, water to the water rights holder</p> |
| <p style="text-align: right;">103</p> <p>1 bottom of, again, page 3 on Cortez Exhibit 4 [sic].</p> <p>2 You say here that "Based on my experience and</p> <p>3 knowledge of the 1944 Water Treaty, navigation is</p> <p>4 considered as an authorized use of the waters of the</p> <p>5 basin." Did I read that correctly?</p> <p>6 A. Yes.</p> <p>7 Q. And then you say, "The primary limiting</p> <p>8 factors are the current hydrology and infrastructure</p> <p>9 constructed upstream of the international reach of</p> <p>10 the river and boundary, known as the limitrophe" --</p> <p>11 am I saying that correctly?</p> <p>12 A. The limitrophe.</p> <p>13 Q. -- "limitrophe and its tributaries." Did I</p> <p>14 read that accurately?</p> <p>15 A. Yes.</p> <p>16 Q. Limitrophe?</p> <p>17 A. Yes.</p> <p>18 Q. Okay. How is current hydrology a limiting</p> <p>19 factor?</p> <p>20 A. Okay. So current hydrology is a limiting</p> <p>21 factor because the basin itself is drying. Amistad</p> <p>22 and Falcon Reservoirs combined are currently at</p> <p>23 record lows. Flows coming upstream of Amistad Dam</p> <p>24 have been decreasing with time. So, generally, we'll</p> <p>25 say it's a drought. That is going to impact the</p> | <p style="text-align: right;">105</p> <p>1 there.</p> <p>2 The portion downstream, which is</p> <p>3 governed by the 1944 Water Treaty after Fort Quitman,</p> <p>4 is sort of like its own river basin because it's been</p> <p>5 disconnected due to the operational practices.</p> <p>6 Q. How much of that water is allocated to the</p> <p>7 federal government?</p> <p>8 A. Could you be specific in which region?</p> <p>9 Q. The region that we're talking about here,</p> <p>10 the Rio Grande River.</p> <p>11 A. Oh, Okay. There's no allocation of water to</p> <p>12 the federal government beyond the treaty giving the</p> <p>13 water to the United States and then public law giving</p> <p>14 that water to -- for management by the State of</p> <p>15 Texas.</p> <p>16 Q. So is all of the water on the U.S. side</p> <p>17 allocated to Texas?</p> <p>18 A. You're not talking about a physical side,</p> <p>19 right?</p> <p>20 Q. What do you mean I'm "not talking about a</p> <p>21 physical side"?</p> <p>22 A. So, within the stream, it can be commingled</p> <p>23 with Mexico water, right? So there's not --</p> <p>24 Q. Oh, I see. Okay.</p> <p>25 A. -- not a physical boundary side, that that</p> |

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| <p style="text-align: right;">106</p> <p>1 side of the water is U.S.'s is what I was getting to.</p> <p>2 Q. I see. All right. Okay. So with respect</p> <p>3 to the allocation of water rights, is all of the</p> <p>4 allocation of water rights for the water allocated to</p> <p>5 the U.S. held by Texas?</p> <p>6 A. Assuming that it is below -- the reservoirs</p> <p>7 are below conservation. Once -- you know, if it's a</p> <p>8 flood and it reaches above conservation, then it</p> <p>9 is then the Commission's responsibility to evacuate</p> <p>10 those flood flows. But neither country has an</p> <p>11 interest in those waters, I believe, is what the</p> <p>12 treaty says.</p> <p>13 Q. I see. And I think you mentioned earlier</p> <p>14 there hasn't been a flood at the Amistad Dam since</p> <p>15 2010?</p> <p>16 A. That is correct.</p> <p>17 Q. You say here that "Under current hydrology</p> <p>18 and channel conditions, navigation would be limited</p> <p>19 to smaller watercraft and is dependent on the exact</p> <p>20 cross-section and water depths in the region being</p> <p>21 traversed." Did I read that right?</p> <p>22 A. Yes, that's correct.</p> <p>23 Q. Okay. And then you say, "There is</p> <p>24 infrastructure" -- I'm reading -- strike that.</p> <p>25 So I'm continuing on to page 4 of</p> | <p style="text-align: right;">108</p> <p>1 A. No.</p> <p>2 Q. Is it possible there's more than 20?</p> <p>3 A. Possibly.</p> <p>4 Q. Okay. Where is the first weir located on</p> <p>5 the Rio Grande River in relation to the Amistad Dam?</p> <p>6 A. Below Amistad Dam has a -- is that a</p> <p>7 weir? -- I believe it has a weir.</p> <p>8 Q. Now, you testified -- or your expert report</p> <p>9 says that if the water level is high enough --</p> <p>10 high -- strike that.</p> <p>11 Your expert report says that if the</p> <p>12 water depth is high enough, it can drown out the</p> <p>13 impact on navigation caused by these 20-plus weirs on</p> <p>14 the Rio Grande River, right?</p> <p>15 A. That is what I say, yes.</p> <p>16 Q. How high would the water depth need to be to</p> <p>17 drown out the effects of the 20-plus weirs on the Rio</p> <p>18 Grande River?</p> <p>19 A. That is dependent on the cross-section and</p> <p>20 specific weir that you would be looking at.</p> <p>21 Q. Okay. For any of them? In other words, you</p> <p>22 said there's more than 20. The first one -- let's</p> <p>23 start with the first one.</p> <p>24 A. I don't think I said more than 20, but...</p> <p>25 Q. It's possible that there's more than 20,</p> |
| <p style="text-align: right;">107</p> <p>1 Exhibit -- Cortez Exhibit 2, your expert report. You</p> <p>2 say, "There is infrastructure like weirs and small</p> <p>3 diversion dams that would limit access at lower water</p> <p>4 levels. At higher water levels, the effect of these</p> <p>5 minor infrastructures are drowned out, making it</p> <p>6 easier to traverse the full stretch of the river."</p> <p>7 Did I read that correctly?</p> <p>8 A. That is correct, yes.</p> <p>9 Q. Okay. What is a weir?</p> <p>10 A. A weir?</p> <p>11 Q. Uh-huh.</p> <p>12 A. So a weir is a hydraulic control device</p> <p>13 that's commonly built either -- it can be done in a</p> <p>14 canal or a river or some sort of water conveyance</p> <p>15 structure that is used to hydrologically control the</p> <p>16 flow of water over the weir as well as the height of</p> <p>17 the water over the weir. And it's a control device</p> <p>18 that's used for various different reasons.</p> <p>19 Q. How many weirs are there on the Rio Grande</p> <p>20 River?</p> <p>21 A. I could not give an accurate number without</p> <p>22 reviewing site by site for all our day use.</p> <p>23 Q. Is it possible there's more than 100?</p> <p>24 A. More than 100? No.</p> <p>25 Q. Is it possible there's more than 50?</p> | <p style="text-align: right;">109</p> <p>1 okay.</p> <p>2 Let's start with the first one. How</p> <p>3 high would the water level need to be in the Rio</p> <p>4 Grande River to drown out the effects to navigation</p> <p>5 caused by the first weir?</p> <p>6 A. I would -- to give an accurate answer, I</p> <p>7 would have to look at the actual weir, so the</p> <p>8 structure of the weir, and perform additional</p> <p>9 analysis. Off the top of my head, I could not answer</p> <p>10 that question.</p> <p>11 Q. Can you answer that question for any of the</p> <p>12 weirs on the Rio Grande River?</p> <p>13 A. It would require additional analysis.</p> <p>14 Q. You also mention diversion, small diversion</p> <p>15 dams, right?</p> <p>16 A. Yes, I do.</p> <p>17 Q. How many small diversion -- before we move</p> <p>18 on, you said that it would depend on each individual</p> <p>19 weir what water level was necessary to drown out</p> <p>20 their impacts on navigation, right?</p> <p>21 A. Yes.</p> <p>22 Q. Is there an average water depth you would --</p> <p>23 you could reasonably conclude would be sufficient to</p> <p>24 drown out the effects of the weirs along -- of all of</p> <p>25 the weirs along the stretch of the Rio Grande River?</p> |

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| <p>110</p> <p>1 A. That is a determination where I would want 2 to be able to do technical analysis in order to 3 provide, not just an off-the-hand or back-of-the- 4 napkin number.</p> <p>5 Q. Sure. Let me pose it as a hypothetical. 6 If the water was -- if the entire 7 section of the Rio Grande River was 50 feet deep, do 8 you believe that that would drown out the effects of 9 the weirs along the Rio Grande River?</p> <p>10 A. 50 feet in depth?</p> <p>11 Q. Correct. Along the entire stretch.</p> <p>12 A. I believe for the weirs that seems like a 13 reasonable number hypothetically without additional 14 technical analysis.</p> <p>15 Q. What about ten feet of water depth?</p> <p>16 A. I would require technical analysis to give a 17 judgment on that.</p> <p>18 Q. It's fair to say that you couldn't just say 19 even right now that, back-of-napkin, ten feet would 20 be sufficient to drown out the effects of the weirs 21 along the -- on average along the Rio Grande River?</p> <p>22 A. That is correct.</p> <p>23 Q. Okay. You also mentioned small diversion 24 dams, right?</p> <p>25 A. Yes, I do.</p> | <p>112</p> <p>1 50 feet of water depth because of how much water is 2 being diverted by the Maverick Dam?</p> <p>3 A. Say that again.</p> <p>4 Q. Yeah. So the -- you know what, let's take 5 this step by step. What is a diversion dam?</p> <p>6 A. Okay. So a diversion dam is another 7 hydrolog -- hydraulic control structure which is 8 designed to back water up in order to divert that 9 into something like a canal for, in this case, the 10 purpose of irrigation and power generation.</p> <p>11 Q. As I understand it from your expert report, 12 the Maverick Dam diverts water from the Rio Grande 13 River?</p> <p>14 A. That is correct, yes.</p> <p>15 Q. And then it reinserts the water further 16 downstream into the Rio Grande River?</p> <p>17 A. That is correct, yes.</p> <p>18 Q. Approximately how long is the stretch 19 between where the water is diverted to where it is 20 reinserted in the Rio Grande River?</p> <p>21 A. It's approximately 38, but let me confirm. 22 About 35.8 river miles, according to my report.</p> <p>23 Q. Okay. Is there a name for that 35.8-mile 24 stretch that you guys use at IBWC?</p> <p>25 A. Not to my knowledge, no.</p> |
| <p>111</p> <p>1 Q. How many small diversion dams are there on 2 the Rio Grande River?</p> <p>3 A. In the section that we are discussing, I'm 4 aware of Maverick Dam.</p> <p>5 Q. Okay. So one?</p> <p>6 A. That's correct.</p> <p>7 Q. Okay. And you talk about Maverick Dam in 8 the report. We're going to get to that in a little 9 bit more detail. Okay.</p> <p>10 So I'm curious, in your -- strike that.</p> <p>11 You're very familiar with Maverick Dam, 12 right?</p> <p>13 A. I'm familiar with it, yes.</p> <p>14 Q. How high would the water depth need to be to 15 drown out the effects of the Maverick Dam on 16 navigation along the Rio Grande River?</p> <p>17 A. I couldn't give a number on the required 18 height.</p> <p>19 Q. Would 50 feet of water depth be sufficient 20 to overcome the effects of the Maverick Dam on 21 navigation along the Rio Grande River?</p> <p>22 A. That may be a reasonable number without 23 reviewing, you know, the actual schematic of the dam 24 and the heights of the dam and things of that nature.</p> <p>25 Q. Is it possible that you might need more than</p> | <p>113</p> <p>1 Q. What is the water level -- strike that. 2 What is the average water level along 3 that 35.8-mile-point stretch below the Maverick Dam 4 over the past year?</p> <p>5 A. Average water level in that stretch over the 6 past year. I would have to look at the data to give 7 a number. It's not going to be a large number.</p> <p>8 It's specifically the distance that's 9 between the diversion for Maverick Canal and to where 10 it's reinserted.</p> <p>11 Q. Uh-huh. How much water approximately is 12 diverted as a percentage from the Rio Grande River by 13 the Maverick Dam?</p> <p>14 A. As a percentage? Without calculating it -- 15 okay. It's -- so at its maximum capacity, the 16 Maverick Canal will divert about -- this isn't a 17 hundred percent accurate number, but around twelve to 18 thirteen hundred CFS, without a calculator. And 19 it's -- the ability to take that water through the 20 canal is dependent on the releases that are coming 21 out of Amistad Dam.</p> <p>22 So if the release is 30, then it is 23 operated to try and divert as much water through the 24 canal to maximize power generation for their 25 purposes.</p> |

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| <p style="text-align: right;">114</p> <p>1 THE REPORTER: I'm sorry, "maximize 2 power generation." 3 THE WITNESS: For their purposes. 4 THE REPORTER: Thank you. 5 Q. (BY MR. STONE) So if you increase the 6 amount of water depth by the Maverick Dam, the 7 Maverick Dam is going to take more of that water for 8 the purposes of hydroelectric power generation? 9 A. Up to the capacity limits of the canal 10 itself. 11 Q. What are the capacity limits of the canal 12 itself? 13 A. Roughly 40 CMS, cubic meters per second. I 14 would need a calculator to convert it. 15 Q. Is the 35.8-mile stretch below that Maverick 16 Dam diversion currently navigable? 17 MR. HARRISON: Objection. Form. 18 A. I could not give a speci -- I could not 19 specify if it's navigable or not. 20 Q. (BY MR. STONE) And would just releasing 21 water from the Amistad Dam make that water navigable? 22 MR. HARRISON: Objection. Form. 23 A. If -- that section of the river is highly 24 dependent on the releases out of Amistad Dam, but if 25 there is localized rain flow -- rainfall that falls</p> | <p style="text-align: right;">116</p> <p>1 strike that. 2 Is there any other infrastructure on the 3 Rio Grande River that would be a limiting factor for 4 the purposes of navigation? 5 A. Besides dams and weirs? 6 Q. Yes. 7 A. There are cableways in the -- that reach of 8 the river that are -- so a cableway is an 9 infrastructure structure that's used for the metering 10 of water. It has a steel cable that goes across from 11 bank to bank. And then, using a cable car, our 12 employees can measure the river itself. 13 Q. So there's a -- did you say "cable car"? 14 A. It's a steel cable that's stretched across 15 the river. 16 Q. And is there a car -- some kind of thing 17 that people climb into that is transported back and 18 forth across this cable? 19 A. It depends on the location. Some of them 20 have been replaced with mechanical equipment, so 21 there are remote control devices that go across. 22 Other places are going to have a physical metal car 23 structure that hangs and is suspended on a cable and 24 is then traveling back and forth across. 25 Q. And how would the cableways crossing from</p> |
| <p style="text-align: right;">115</p> <p>1 on the tributaries that affect that section of the 2 river, then it may not just be Amistad -- 3 Q. (BY MR. STONE) Okay. 4 A. -- contributing. And I just need a quick 5 break, five minutes. 6 Q. Okay. Yeah, yeah. Let's go off the record. 7 THE VIDEOGRAPHER: The time is 12:03 8 p.m. Going off the record. 9 (Lunch recess 12:03 p.m. to 1:06 p.m.) 10 THE VIDEOGRAPHER: The time is 1:06 p.m. 11 We're back on the record. 12 Q. (BY MR. STONE) I'm sharing on the screen 13 again what we've marked as Cortez Exhibit 2. This is 14 a copy of your expert report. 15 Picking back up where we left off on 16 page 4 of Exhibit 2, I had a question. Is the 17 diversion channel at Maverick Dam considered a 18 Section 10 water? 19 A. I could not give an answer to that question. 20 Q. Now, in your expert report, you identify the 21 weirs and small diversion dams as infrastructure that 22 would be limiting factors for navigation on the Rio 23 Grande River, right? 24 A. I do, yes. 25 Q. Are there any other infra -- is there --</p> | <p style="text-align: right;">117</p> <p>1 bank to bank impede navigation on the Rio Grande 2 River? 3 A. It would depend on the height of the steel 4 cable. 5 Q. Can you elaborate? What do you mean by "it 6 would depend on the height"? 7 A. So in other areas -- not the one that we're 8 specifically talking about -- I know that it is a 9 consideration for navigation when on the river to 10 avoid those cables and such because they -- depending 11 on where it is, the height could be -- as the water 12 level increases, the distance to that cable would 13 also decrease. So it's a function of operations. 14 Q. How many cableways are there in the Rio 15 Grande River? 16 A. I would say at least five to six, but I 17 could not give a specific answer. It's a common 18 structure. 19 Q. Do you know where they are on the Rio Grande 20 River? 21 A. I know instances of them. 22 Q. Are they permanent? 23 A. Yes, they are. 24 Q. Are they on the river mile document that 25 we -- what we marked as Cortez Exhibit 5?</p> |

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| <p>118</p> <p>1 A. Only if it is not near the gaging station. 2 There's usually -- it's normal for there to be a 3 cableway located with a gaging station. 4 Q. Other than the weirs, small diversion 5 dams -- and by that we mean the Maverick Dam -- and 6 cableways, are there any -- is there any other 7 infrastructure on the Rio Grande River that would 8 impede navigation? 9 A. I couldn't think of anything at this time. 10 Q. You write in your report on page 4 of Cortez 11 Exhibit 2 that "additional infrastructure may be 12 required to allow passage through these sections of 13 the river, depending on the size of the watercraft 14 and destination," right? 15 A. Yes, I do. 16 Q. What -- all right. So you say, "depending 17 on the size of the watercraft and destination." So 18 for the purposes of these questions, I want you to 19 assume that the stretch at issue is that river mile 20 275.5 to river mile 610, okay? 21 What additional infrastructure would you 22 need for commercial barge traffic to travel down the 23 Rio Grande River? 24 MR. HARRISON: Objection. Form. 25 A. I couldn't give specifications on the exact</p> | <p>120</p> <p>1 infrastructure would be required to allow passage 2 down the Rio Grande River of a cruise ship? 3 MR. HARRISON: Objection. Form. 4 A. I wouldn't be able to provide an answer. 5 Q. (BY MR. STONE) What additional 6 infrastructure would be required to allow passage 7 down the Rio Grande River of a small feeder ship? 8 MR. HARRISON: Objection. Form. 9 A. Define "a small feeder ship." 10 Q. (BY MR. STONE) Do you know what a small 11 feeder ship is? 12 A. No. 13 Q. Okay. What infrastructure -- what 14 additional infrastructure would be required to allow 15 passage down the Rio Grande River of a johnboat? 16 MR. HARRISON: Objection. Form. 17 A. Again, as I -- so it depends on the stretch 18 of river. The Commission does operate things that 19 are typically described as johnboats. 20 Q. (BY MR. STONE) Remember, for the purposes 21 of this question, I told you the stretch of the river 22 is mile marker 275.5 to 610. 23 A. Yes. 24 Q. Okay. So what additional infrastructure for 25 that stretch of river would need -- would be required</p> |
| <p>119</p> <p>1 infrastructure required. 2 Q. (BY MR. STONE) What additional 3 infrastructure would be required to allow passage for 4 cargo ships down the Rio Grande River? 5 MR. HARRISON: Objection. Form. 6 A. I wouldn't be able to specify the exact 7 infrastructure. 8 Q. (BY MR. STONE) What type of 9 infrastructure -- additional infrastructure would be 10 required to allow passage down the Rio Grande River 11 for a tanker? 12 MR. HARRISON: Objection. Form. 13 A. I wouldn't be able to give an exact answer. 14 Q. (BY MR. STONE) What additional 15 infrastructure would be required to allow passage 16 down the Rio Grande River for a passenger ship? 17 MR. HARRISON: Objection. Form. 18 A. I wouldn't be able to give an answer. 19 Q. (BY MR. STONE) What additional 20 infrastructure would be required to allow passage 21 down the Rio Grande River of a cruise ship? 22 A. I wouldn't -- 23 MR. HARRISON: Objection. Form. 24 A. I wouldn't be able to give an answer. 25 Q. (BY MR. STONE) What additional</p> | <p>121</p> <p>1 for passage of johnboats down the Rio Grande River? 2 MR. HARRISON: Objection. Form. 3 A. I couldn't provide specifics beyond I know 4 that we use that sort of watercraft to access the 5 river at certain stretches. 6 Q. (BY MR. STONE) What -- okay. So, earlier, 7 you asked what is a small feeder ship. So for the 8 purposes of this question, I want you to assume that 9 a small feeder ship is a small vessel with containers 10 that can be moved to a larger ship, okay? 11 What additional infrastructure would be 12 required to allow passage of smaller feeder ships 13 down the Rio Grande River? 14 MR. HARRISON: Objection. Form. 15 A. I would not be able to give you a specific 16 answer. 17 Q. (BY MR. STONE) What additional 18 infrastructure would be required to allow passage 19 down the Rio Grande River of AirRanger Rhino 20 airboats? 21 MR. HARRISON: Objection. Form. 22 A. AirRangers are -- it's an airboat that we 23 have at the agency that's used to traverse the Rio 24 Grande at present. Its design is -- because it 25 floats on the top of water and it's controlled by</p> |

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| <p style="text-align: right;">122</p> <p>1 air, you have a much reduced drag or depth 2 requirement in order to operate that. 3 In terms of additional infrastructure, I 4 would not be able to give specifics on what would be 5 required for that specific type of boat. 6 Q. (BY MR. STONE) What additional 7 infrastructure would be required to allow passage 8 down the Rio Grande River of a 1925 Pacific boat? 9 MR. HARRISON: Objection. Form. 10 A. Again, it depends on the stretch of river 11 that you are looking at to travel. The Commission 12 utilizes this equipment to -- in its conduction of 13 its duties. 14 Q. (BY MR. STONE) The stretch I'm asking is 15 about 275.5 to 610. What additional infrastructure 16 would be required in that stretch to allow passage of 17 a 1925 Pacific boat down the Rio Grande River? 18 MR. HARRISON: Objection. Form. 19 A. It depends on the exact site conditions. If 20 there was a flood going on, I could make an 21 assumption, taking that information into 22 consideration, that a johnboat of that type would be 23 able to traverse the river without any modifications 24 or additional infrastructure. 25 Q. (BY MR. STONE) Okay. So let me clarify,</p> | <p style="text-align: right;">124</p> <p>1 Q. (BY MR. STONE) What is the basis for that 2 assumption? 3 A. The basis for that assumption would be the 4 capabilities of Amistad Dam in terms of releasing 5 water. So if it was going to go to a full release 6 and it was requested by either country to make that, 7 then I could foresee it being possible to traverse 8 that section of river as described. But this is just 9 a sort of a back-of-the-napkin answer. 10 Q. Hold on. So I understand your question -- 11 I'm sorry, your response, you're saying -- I'm not 12 asking about if you release enough water to make it 13 happen. I'm talking about conditions as they exist 14 today. 15 Could a 1925 Pacific boat traverse the 16 entire stretch from mile marker 275.5 to 610 on the 17 Rio Grande River? 18 A. Okay. You're saying as of today or -- 19 Q. Uh-huh. 20 A. I understand. Thank you. Given that the 21 release rates at present are fairly low -- I think 22 it's around 20 CMS, which would be about 700 CFS -- a 23 lot of that water is being diverted out of -- into 24 Maverick Canal, as we've explained. So in that 25 instance there would be that stretch that we've</p> |
| <p style="text-align: right;">123</p> <p>1 since we haven't had a flood since 2010, right? 2 A. Yes, that is accurate. 3 Q. Okay. So -- and we're currently in drought 4 conditions, right? 5 A. That is correct, accurate. 6 Q. Okay. So, currently, in the absence of 7 flood-like conditions, what additional infrastructure 8 would be required to allow passage down the entire 9 stretch of river mile 275.5 to 610 for a 1925 10 johnboat? 11 MR. HARRISON: Objection -- 12 Q. (BY MR. STONE) 1925 Pacific boat. Sorry. 13 MR. HARRISON: Objection. Form. 14 A. I couldn't speculate if there would be a 15 requirement for additional infrastructure. It 16 depends on the flow rates out of the dam absent of 17 flood conditions. 18 Q. (BY MR. STONE) So it's possible that right 19 now a 1925 Pacific boat can already traverse the 20 entire stretch of the Rio Grande River from mile 21 marker 275.5 to 610? 22 MR. HARRISON: Objection. Form. 23 A. Without doing a study of the full stretch of 24 river that we're discussing, I believe it's a 25 reasonable assumption.</p> | <p style="text-align: right;">125</p> <p>1 discussed previously where water levels would be 2 significantly reduced. And just at this given 3 moment, it is unlikely our employees would deploy 4 watercraft in that stretch. 5 Q. How deep does the water need to be for you 6 to operate a 1925 Pacific boat? 7 A. I'm not an expert on boating. 8 Q. Then how do you know that a 1925 Pacific 9 boat can navigate the entire stretch of the Rio 10 Grande River today except for the 35.8-mile stretch 11 below the Maverick Dam diversion? 12 MR. HARRISON: Objection. Form. 13 A. Based on the description of the boat here 14 that was provided to me. 15 Q. (BY MR. STONE) And does that description of 16 the boat tell you how much water depth is needed in 17 order for the 1925 Pacific boat to operate in the Rio 18 Grande River? 19 A. It does not. 20 Q. So what about the description of the 1925 21 Pacific boat leads you to believe that it could 22 navigate anywhere on the Rio Grande River except for 23 that 35.8-mile stretch below the Maverick Dam 24 diversion? 25 MR. HARRISON: Objection. Form.</p> |

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| <p style="text-align: right;">126</p> <p>1 A. Because I'm familiar with its usages on the 2 river. So if there is -- sorry. Can you start with 3 the original assumption? 4 Q. (BY MR. STONE) Yeah. So I'm asking about 5 the -- so I asked, right, what depth is needed for 6 a -- to operate a 1925 Pacific boat, right? 7 A. Right. 8 Q. And you said you didn't -- you don't know. 9 A. Right. 10 Q. Right? So then I asked, if you don't know 11 what depth is needed to operate a 1925 Pacific boat, 12 how do you know that the water is sufficiently deep 13 along the entire stretch of the Rio Grande River at 14 issue here except for that 35.8-mile stretch below 15 the Maverick Dam diversion? 16 A. Okay. Just based off of knowledge of how we 17 operate. 18 Q. Are you aware of the 1925 Pacific boats 19 operating in every stretch of the Rio Grande River 20 except for that 35.8-mile stretch below the Maverick 21 Dam diversion? 22 A. Specifically for the 1925 Pacific boat, it 23 is currently located in -- downstream of the region 24 that we're talking about. So that specific boat 25 would be unlikely to be deployed right now because,</p> | <p style="text-align: right;">128</p> <p>1 MR. HARRISON: Objection. Form. 2 A. I'm not sure. 3 Q. (BY MR. STONE) How many people can ride in 4 the 1925 Pacific boat? 5 MR. HARRISON: Objection. Form. 6 A. In total? I do not know the total amount. 7 Q. (BY MR. STONE) What is the weight capacity 8 for a 1925 Pacific boat? 9 A. I do not know. 10 Q. Are you an expert on 1925 Pacific boats? 11 MR. HARRISON: Objection. Form. 12 A. I am not. 13 Q. (BY MR. STONE) Are you an expert on the 14 navigation of the Rio Grande River by 1925 Pacific 15 boats? 16 MR. HARRISON: Objection. Form. 17 A. I am not. 18 Q. (BY MR. STONE) What additional 19 infrastructure would you need on the Rio Grande River 20 to connect the contents of small vessels with rail? 21 MR. HARRISON: Objection. Form. 22 A. I wouldn't be able to give specifics. 23 Q. (BY MR. STONE) What additional 24 infrastructure would you need on the Rio Grande River 25 to connect the contents of small vessels with our</p> |
| <p style="text-align: right;">127</p> <p>1 to my knowledge, it's not nearby. I wasn't sure -- 2 Q. Yeah, if the -- so let's pick the page 12. 3 It's the 12th furthest away from the Amistad Dam, 4 right? Assuming the water there is three feet deep, 5 could the 1925 Pacific boat operate in that location? 6 MR. HARRISON: Objection. Form. 7 A. If it's the boat that I believe it is from 8 recollection, I don't believe it could. 9 Q. (BY MR. STONE) When you say it's the boat 10 that you "believe it is from recollection," how 11 familiar are you with the 1925 Pacific boat? 12 A. Not the brand names. 13 Q. Like could you recognize a 1925 Pacific boat 14 if I showed it to you? 15 A. I could speculate. I couldn't say if 16 it's -- right. There can be different models of 17 boats, so I wouldn't be able to specifically say that 18 is a -- but I could say that is a 30-foot-long boat. 19 Q. Why is it called a 1925 Pacific boat? 20 A. I believe that's just the name of the 21 equipment. 22 Q. Who makes it? 23 A. I could not tell you. 24 Q. What different sizes do 1925 Pacific boats 25 come in?</p> | <p style="text-align: right;">129</p> <p>1 modern form of transport by truck? 2 MR. HARRISON: Objection. Form. 3 A. I wouldn't be -- I would not be able to give 4 a specific answer. 5 Q. (BY MR. STONE) What additional 6 infrastructure would be required on the Rio Grande 7 River to offload the -- okay. 8 What additional infrastructure would be 9 required on the Rio Grande River to offload contents 10 of vessels onto other modes of transportation? 11 MR. HARRISON: Objection. Form. 12 A. I would not be able to give a specific 13 answer. 14 Q. (BY MR. STONE) At the bottom of this 15 paragraph here on page 4, first paragraph, page 4 of 16 Exhibit 2, you say, "A change in priority and 17 operations, removal of constructed infrastructure, 18 additional infrastructure, or river channel 19 modifications could allow for expanded navigational 20 access as well as longer period of navigation." Did 21 I read that correctly? 22 A. I believe that is accurate, yes. 23 Q. A change in -- when you say, "a change in 24 priority" of use, are you referring specifically to 25 the 1944 treaty?</p> |

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| <p style="text-align: right;">130</p> <p>1 A. That is correct, yes.</p> <p>2 Q. Would a change in the priority of use in the</p> <p>3 1944 treaty relating to navigation govern the</p> <p>4 issuance of Tex -- the issuance of water issued to</p> <p>5 Texas as it relates to water rights? Strike that.</p> <p>6 It's a bungled question. Let's do it again, all</p> <p>7 right?</p> <p>8 Would a change in the navigational</p> <p>9 priority in the 1944 treaty have an impact on Texas's</p> <p>10 water rights?</p> <p>11 MR. HARRISON: Objection. Form.</p> <p>12 A. To the extent that the water treaty</p> <p>13 specifies the allotment of waters between the two</p> <p>14 countries. Whether it directly or specifically</p> <p>15 impacts the State of Texas, I couldn't speak to that,</p> <p>16 because that's a domestic issue.</p> <p>17 Q. (BY MR. STONE) Water rights are what</p> <p>18 actually permit use, not the 1944 treaty, right?</p> <p>19 A. Specifically for the United States' portion,</p> <p>20 it is the water rights that are granted by the State</p> <p>21 of Texas to its users.</p> <p>22 Q. So a change in priority of navigation in the</p> <p>23 1944 treaty would not actually change the water</p> <p>24 rights as it relates to navigation in Texas?</p> <p>25 A. The treaty alone specifically, no. It</p> | <p style="text-align: right;">132</p> <p>1 the 1944 treaty?</p> <p>2 MR. HARRISON: Objection. Form.</p> <p>3 A. I wouldn't be able to give specifics on</p> <p>4 the -- how feasible that would be. It just depends</p> <p>5 on all parties coming to an agreement.</p> <p>6 Q. (BY MR. STONE) How high would the priority</p> <p>7 need to be changed in order to allow expanded</p> <p>8 navigational access along the Rio Grande River?</p> <p>9 MR. HARRISON: Objection. Form.</p> <p>10 A. I couldn't give an answer to that.</p> <p>11 Q. (BY MR. STONE) So it's currently --</p> <p>12 THE REPORTER: I'm sorry, I didn't get</p> <p>13 your answer.</p> <p>14 THE WITNESS: I could not give an</p> <p>15 answer, or I would not be able to give a response to</p> <p>16 that question.</p> <p>17 Q. (BY MR. STONE) I'm taking you to page 10 of</p> <p>18 your report that lists the water priorities. Do you</p> <p>19 see it?</p> <p>20 A. I do.</p> <p>21 Q. And navigation is listed as the fifth</p> <p>22 priority, right?</p> <p>23 A. That is correct, yes.</p> <p>24 Q. If navigation was made the fourth priority,</p> <p>25 would that expand navigational access along the Rio</p> |
| <p style="text-align: right;">131</p> <p>1 would -- the allotments would be still what was</p> <p>2 stated within the treaty.</p> <p>3 Q. All right. What would be the process for</p> <p>4 changing the priority of navigation in the 1944</p> <p>5 treaty?</p> <p>6 A. The treaty, in Article 3, just notes that</p> <p>7 the --</p> <p>8 THE REPORTER: Hang on. I need the</p> <p>9 question repeated, please. It was cutting out.</p> <p>10 MR. STONE: Sorry, ma'am.</p> <p>11 Q. (BY MR. STONE) What is the process for</p> <p>12 changing the priority of navigation in the 1944</p> <p>13 treaty?</p> <p>14 A. It would be at the discretion of the two</p> <p>15 governments, so an agreement would have to be made</p> <p>16 what the actual form and domestic process is is, you</p> <p>17 know, subject to each country's requirements.</p> <p>18 Q. Do you know what those requirements are in</p> <p>19 the U.S.?</p> <p>20 A. Generally, but not specifics.</p> <p>21 Q. Has there ever been a change in priority in</p> <p>22 the 1944 treaty in the past?</p> <p>23 A. Not to my knowledge.</p> <p>24 Q. How feasible do you think, in your opinion,</p> <p>25 would it be to change the priority of navigation in</p> | <p style="text-align: right;">133</p> <p>1 Grande River?</p> <p>2 MR. HARRISON: Objection. Form.</p> <p>3 A. So the priority order here is just -- it</p> <p>4 does give a priority order as it is, but these are</p> <p>5 also the accepted uses of the water under the treaty,</p> <p>6 and that's why number 7 has a final catch-all, "any</p> <p>7 other beneficial uses which may be determined by the</p> <p>8 Commission."</p> <p>9 So it's -- the order does matter, but</p> <p>10 it -- it's all relative to each other.</p> <p>11 Q. (BY MR. STONE) Let me just ask like what</p> <p>12 water is currently used for, flowing out of the</p> <p>13 Amistad Dam. Is the water currently used for --</p> <p>14 going down the priority list, is it currently used</p> <p>15 for any domestic and municipal uses?</p> <p>16 A. To my knowledge, yes.</p> <p>17 Q. Is it currently being used for any</p> <p>18 agricultural and stock raising purposes?</p> <p>19 A. To my knowledge, yes.</p> <p>20 Q. Is it currently being used for any electric</p> <p>21 power purposes?</p> <p>22 A. To my knowledge, yes.</p> <p>23 Q. Is it currently being used for any other</p> <p>24 industrial uses?</p> <p>25 A. It depends on what the definition is</p> |

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| <p style="text-align: right;">134</p> <p>1 considered under "other industrial uses."</p> <p>2 Q. Are you an expert on other industrial uses</p> <p>3 in the 1944 Water Treaty?</p> <p>4 MR. HARRISON: Objection. Form.</p> <p>5 A. I'm aware of other uses that are used for</p> <p>6 industry on the 1944 Water Treaty.</p> <p>7 Q. (BY MR. STONE) So, currently, there are</p> <p>8 water rights allocated to other industrial uses under</p> <p>9 the -- I'll stop there.</p> <p>10 A. Yes. I understand mining would be one of</p> <p>11 the ones that may not fall under the previous ones.</p> <p>12 Q. I think you already testified that there are</p> <p>13 no water rights allocated for navigation?</p> <p>14 MR. HARRISON: Objection. Form.</p> <p>15 A. Not to my knowledge.</p> <p>16 Q. (BY MR. STONE) Are there any water rights</p> <p>17 allocated for fishing and hunting?</p> <p>18 A. Not to my knowledge.</p> <p>19 Q. Are there any water rights allocated for any</p> <p>20 other beneficial use which may be determined by the</p> <p>21 Commission?</p> <p>22 A. I do not have any knowledge to that</p> <p>23 information.</p> <p>24 Q. Other than mining, are you aware of any</p> <p>25 other industrial uses?</p> | <p style="text-align: right;">136</p> <p>1 answer, but it would be my expectation that it would.</p> <p>2 Q. (BY MR. STONE) If you removed the Maverick</p> <p>3 diversion dam, would it increase or expand</p> <p>4 navigational access on the Rio Grande River?</p> <p>5 MR. HARRISON: Objection. Form.</p> <p>6 A. So if you did remove the Maverick Dam, you</p> <p>7 would know -- you would have a reduced ability to</p> <p>8 make a diversion into the canal. So in that sense</p> <p>9 there would be increased flows downstream of the dam,</p> <p>10 and then based off what is being released...</p> <p>11 Q. (BY MR. STONE) And then, if you removed the</p> <p>12 cableways, would that expand navigational access</p> <p>13 along the Rio Grande River?</p> <p>14 MR. HARRISON: Objection. Form.</p> <p>15 A. If the cableway structure is preventing</p> <p>16 access or navigational access, then removing of that</p> <p>17 structure would then permit access.</p> <p>18 Q. (BY MR. STONE) But you're not sure if</p> <p>19 it's -- if those cableways are actually obstructing</p> <p>20 access right now?</p> <p>21 A. Obstruction of access would be entirely</p> <p>22 dependent on the flow rates of the river.</p> <p>23 Q. So if we change the priority in operations,</p> <p>24 we remove constructed infrastructure on the Rio</p> <p>25 Grande River, we add additional infrastructure,</p> |
| <p style="text-align: right;">135</p> <p>1 A. I mean, commercial, if a business has a use</p> <p>2 for the water, for the withdrawal, that could</p> <p>3 probably fall under other use -- other industrial</p> <p>4 uses, but it's -- that's more subject to the</p> <p>5 watermaster's office and how they allocate the waters</p> <p>6 to their users.</p> <p>7 Q. So you say -- again, I'm reading the final</p> <p>8 sentence in this paragraph -- "A future change in</p> <p>9 priority and operations, removal of constructed</p> <p>10 infrastructure" -- actually, let's stop there.</p> <p>11 When you say, "removal of constructed</p> <p>12 infrastructure," what constructed infrastructure are</p> <p>13 you specifically referring to?</p> <p>14 A. This is just a general statement for any</p> <p>15 constructed infrastructure within the Rio Grande.</p> <p>16 Q. So we would move all the weirs?</p> <p>17 MR. HARRISON: Objection. Form.</p> <p>18 A. In my statement that's generalized, saying</p> <p>19 the things, that could be one of the considerations</p> <p>20 in that statement.</p> <p>21 Q. (BY MR. STONE) If you removed all the</p> <p>22 weirs, would that expand navigational access on the</p> <p>23 Rio Grande River?</p> <p>24 MR. HARRISON: Objection. Form.</p> <p>25 A. I would not be able to give a specific</p> | <p style="text-align: right;">137</p> <p>1 undefined, or river channel modifications, it could</p> <p>2 allow expanded navigational access. Is that correct?</p> <p>3 A. That is what my statement generally says.</p> <p>4 Q. What are the river channel modifications you</p> <p>5 mention here?</p> <p>6 A. You could straighten the river or perform</p> <p>7 some dredging work to increase the width and depth of</p> <p>8 it.</p> <p>9 Q. Where would you straighten the river to</p> <p>10 increase or to expand navigational access along the</p> <p>11 Rio Grande River?</p> <p>12 A. This is just a global, general statement</p> <p>13 with no specifics on where that work would be</p> <p>14 conducted.</p> <p>15 Q. Where would you dredge on the Rio Grande</p> <p>16 River to expand navigational access?</p> <p>17 MR. HARRISON: Objection. Form.</p> <p>18 A. That depends on the goal and needs for the</p> <p>19 proponent.</p> <p>20 Q. (BY MR. STONE) Well, I mean, the goal is to</p> <p>21 expand navigational access. So can you identify any</p> <p>22 specific sections of the Rio Grande River where you</p> <p>23 would need to dredge in order to do that?</p> <p>24 MR. HARRISON: Objection. Form.</p> <p>25 MR. STONE: State your objection.</p> |

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| <p style="text-align: right;">138</p> <p>1 MR. HARRISON: He said he didn't -- he</p> <p>2 was providing general examples here and not</p> <p>3 specifics, and now you're asking him about specifics.</p> <p>4 Q. (BY MR. STONE) Go ahead and answer if you</p> <p>5 can.</p> <p>6 A. It's -- again, it's highly dependent on the</p> <p>7 situation and need.</p> <p>8 Q. Isn't it true that if you removed the weirs</p> <p>9 or the diversion dam, that you would significantly</p> <p>10 drop the water elevation above those structures?</p> <p>11 A. At those structures, that is an accurate</p> <p>12 statement, a reasonable statement, yes.</p> <p>13 Q. What do you mean by "longer periods of</p> <p>14 navigation" in the sentence?</p> <p>15 A. Longer periods are -- since the -- a lot of</p> <p>16 what we do and operate for the Commission is</p> <p>17 seasonally based. So, example, releases at Amistad</p> <p>18 are usually done in bulk. So the watermaster, as an</p> <p>19 example -- the same thing could be for Mexico --</p> <p>20 could say, "I want to move 100,000 acre-feet over the</p> <p>21 next 30 days." Like that's his goal.</p> <p>22 So from that standpoint you could</p> <p>23 operate the reservoirs to also conduct navigation</p> <p>24 during those periods, and with those other things</p> <p>25 that I identify contemplating or falling into that.</p> | <p style="text-align: right;">140</p> <p>1 hypothetical.</p> <p>2 So, hypothetically, if you were</p> <p>3 conducting commercial activity up and down the Rio</p> <p>4 Grande River, could that be impacted by the -- by</p> <p>5 unstable levels of water depth?</p> <p>6 A. In the sense that -- so if you're operating</p> <p>7 a kayaking business, right, there may be only a</p> <p>8 season that you want to operate that business for so</p> <p>9 then there may be water supply available to conduct</p> <p>10 that, that business.</p> <p>11 Q. Same hypothetical, but instead of water</p> <p>12 depth, would it be -- could it be impacted by water</p> <p>13 flow, fluctuation in water flow levels?</p> <p>14 MR. HARRISON: Objection. Form.</p> <p>15 A. Those would be the same things, water flow</p> <p>16 levels and water depth.</p> <p>17 Q. (BY MR. STONE) Okay. So water flow means</p> <p>18 the same thing as water depth?</p> <p>19 A. No, no, no. Water flow would just be water</p> <p>20 flow. But you said water flow depth, so that would</p> <p>21 imply water level.</p> <p>22 Q. Yeah, I see -- I see what I did, yes. Okay.</p> <p>23 I -- yes. I shouldn't have said "depth" at the end</p> <p>24 of that, okay.</p> <p>25 So same question, but instead of water</p> |
| <p style="text-align: right;">139</p> <p>1 Q. Could you accomplish it for a period that</p> <p>2 was year-round?</p> <p>3 A. That depends on the available water supply.</p> <p>4 Q. So it's possible with all these changes it</p> <p>5 might not be possible to sustain expanded</p> <p>6 navigational access for a year-round period?</p> <p>7 MR. HARRISON: Objection. Form.</p> <p>8 A. Again, it just -- it depends on what the</p> <p>9 available water supply is in the dams.</p> <p>10 Q. (BY MR. STONE) So, yes, it depends on</p> <p>11 the -- depending on the available water supply at the</p> <p>12 dam?</p> <p>13 A. Yes.</p> <p>14 Q. Got it. Would you agree with me that</p> <p>15 commerce requires a stable level of water?</p> <p>16 MR. HARRISON: Objection. Form.</p> <p>17 A. I couldn't make a specific answer to that,</p> <p>18 but I guess if you could...</p> <p>19 Q. (BY MR. STONE) Sure. Do you think that --</p> <p>20 do you think that it could impact commercial activity</p> <p>21 on the Rio Grande River if the water levels</p> <p>22 fluctuated wildly?</p> <p>23 MR. HARRISON: Objection. Form.</p> <p>24 A. And are we just speculating in general or...</p> <p>25 Q. (BY MR. STONE) So let me rephrase it as a</p> | <p style="text-align: right;">141</p> <p>1 depth, could commercial activity be impacted by</p> <p>2 unstable levels of water flow?</p> <p>3 MR. HARRISON: Objection. Form.</p> <p>4 A. Okay. So in the sense that water flow is a</p> <p>5 function of velocity and also your cross-section, so</p> <p>6 as your cross-section decreases, your velocity is</p> <p>7 going to increase. So if you're operating on the</p> <p>8 river, whether it's a kayak or anything, you're going</p> <p>9 to be taking that into consideration as you do</p> <p>10 whatever you're doing.</p> <p>11 So in that sense, just operating a boat,</p> <p>12 you're going to want to be monitoring water flow as</p> <p>13 it impacts water velocity.</p> <p>14 Q. (BY MR. STONE) So yes?</p> <p>15 A. Say the question again.</p> <p>16 Q. Yes. So your answer is yes?</p> <p>17 A. Yes, it would impact.</p> <p>18 Q. So you have listed out all the things here</p> <p>19 to -- that could be possible to allow for extended --</p> <p>20 expanded navigational access for longer periods of</p> <p>21 navigation. How likely is it, though, for all of</p> <p>22 these things to happen?</p> <p>23 MR. HARRISON: Objection. Form.</p> <p>24 A. I could not speculate on the future desires</p> <p>25 or needs for the users of this water supply...</p> |

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| <p style="text-align: right;">142</p> <p>1 Q. (BY MR. STONE) So it's fair to say you 2 don't have an opinion on the likelihood of any of 3 these things happening? 4 A. I do not. 5 THE REPORTER: I'm sorry, your answer? 6 THE WITNESS: I do not. 7 THE REPORTER: Thank you. 8 Q. (BY MR. STONE) Does the IBWC issue permits 9 for structures erected in the Rio Grande River? 10 A. To my knowledge, yes, permits are issued. 11 MR. STONE: Sorry for the delay on my 12 computer. 13 Q. (BY MR. STONE) Would criminal activity 14 along the Rio Grande River make the use of the river 15 for navigational purposes an impediment? 16 MR. HARRISON: Objection. Form. 17 A. I couldn't give an answer to that. 18 Q. (BY MR. STONE) Isn't it true that the IBWC 19 does not visit certain parts of the Rio Grande River 20 at certain times due to criminal activity concerns? 21 MR. HARRISON: Objection. Form. 22 A. That depends on on-the-ground conditions, 23 but I'm unaware of instances where we have limited 24 access. 25 Q. (BY MR. STONE) Let's move on.</p> | <p style="text-align: right;">144</p> <p>1 A. Okay. Give me a moment to skim to make sure 2 I recollect -- recollect the full thing. 3 And for clarification, you just mean 4 Section 4.0? 5 Q. Correct, yes. We're going through each 6 section. For Section 4.0, is the information 7 contained in that section just factual information? 8 A. A mixture of factual as well as some 9 observations based on my knowledge in how we've 10 operated the reservoirs in the system. 11 Q. Okay. So what in here is not factual 12 information, if you -- identify specifics? 13 A. For instance, there is a sentence in the 14 second paragraph that says, "The water conveyance 15 infrastructure upstream of El Paso, Texas, is 16 operated to maximize beneficial use of these waters 17 for the local region and limit the flows passing 18 downstream." 19 So while it is operated and limits flow 20 passed downstream, my observation is that it's 21 operated in such a manner to maximize beneficial use 22 of those waters. 23 Q. And you would agree with me, though, that 24 the section of the river upstream from El Paso is not 25 the portion of the Rio Grande River between river</p> |
| <p style="text-align: right;">143</p> <p>1 A. Are we starting this section? 2 Q. Yeah. We're going to move on to page -- 3 A. Sorry, I was going to ask for just a quick 4 two-minute break so I can hit the restroom. 5 Q. Yeah, we can -- let's go off the record. 6 THE VIDEOGRAPHER: The time is 1:46 p.m. 7 We're off the record. 8 (Recess 1:46 p.m. to 1:51 p.m.) 9 THE VIDEOGRAPHER: The time is 1:51 p.m. 10 We're back on the record. 11 Q. (BY MR. STONE) IBWC has a water permit 12 along the Rio Grande River, right? 13 A. I'm aware of -- yes. 14 Q. Just one water permit, though, right? 15 A. For the stretch we're talking about, yes. 16 Q. What is that water permit for? 17 A. For drinking water, I believe. 18 Q. All right. So let's go -- let's pick up 19 here at page 6, if you want to look at your paper 20 copy, of Cortez Exhibit 2, your expert report. And, 21 specifically, I want to ask about Section 4. Do you 22 see Section 4, Rio Grande Basin Overview? 23 A. I do, yes. 24 Q. Is the information contained in Section 4 of 25 your expert report all factual information?</p> | <p style="text-align: right;">145</p> <p>1 miles 275.5 and 610, right? 2 A. Correct. 3 Q. Okay. So what other observations are 4 contained in Section 4.0 that are not facts? 5 A. The last sentence on paragraph 3 where I 6 state that the -- "When making releases from the dams 7 in the spring and summer, these releases are limited 8 to only what is necessary" -- 9 THE REPORTER: I need you to slow down 10 reading, please. 11 THE WITNESS: Okay. I'm sorry. 12 A. Hold on. Give me a moment to read through 13 this or not -- to skim it very fast. 14 Okay. Specific to the reaches that we 15 are talking about, I do not see any observations. I 16 believe these are all facts. 17 Q. (BY MR. STONE) Okay. So in Section 4.0 of 18 your expert report, the information contained therein 19 as it relates to the Rio Grande River, the stretch 20 that we're here today about, it's all factual 21 information, right? 22 A. From my rereading of the section, yes, in my 23 recollection. 24 Q. A minute ago you mentioned that IBWC issues 25 permits on the Rio Grande River, right?</p> |

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| <p style="text-align: right;">146</p> <p>1 A. It said that, correct.</p> <p>2 Q. Right. What types of permits does IBWC</p> <p>3 issue?</p> <p>4 A. It would be permits related to structures</p> <p>5 and such that someone may want to install. So if I</p> <p>6 wanted to put a pump in the Rio Grande River, a</p> <p>7 permit would be provided by us in order to allow that</p> <p>8 to happen.</p> <p>9 Q. Do the weirs that are currently in the Rio</p> <p>10 Grande River -- are they permitted by IBWC?</p> <p>11 A. Specifically the weirs, to my knowledge,</p> <p>12 they are owned and operated by the Commission, and it</p> <p>13 was -- that falls under a specific provision of the</p> <p>14 treaty that says we can construct gaging stations and</p> <p>15 any mechanical apparatuses, and that would be</p> <p>16 inclusive of those weirs.</p> <p>17 Q. What specific structures are you aware of on</p> <p>18 the Rio Grande River that have received an IBWC</p> <p>19 permit?</p> <p>20 A. From my knowledge, it would just be like</p> <p>21 pumps as well as if -- USGS, for instance, does</p> <p>22 operate stream gages; not in the section that we're</p> <p>23 talking about. Well, they may have water quality</p> <p>24 gages. So I should change that or restate that.</p> <p>25 So anything that's going to be in our</p> | <p style="text-align: right;">148</p> <p>1 Q. Okay. Going to Section 4.1 of your expert</p> <p>2 report, which begins on page 7 of Exhibit 2. Is all</p> <p>3 of the information contained in Section 4.1 factual</p> <p>4 information?</p> <p>5 A. I believe it is factual, yes.</p> <p>6 Q. There's no opinions expressed in</p> <p>7 Section 4.1?</p> <p>8 A. No.</p> <p>9 Q. In Section 4.2 of your expert report, is all</p> <p>10 the information contained in that section factual?</p> <p>11 A. I believe it is all factual, yes.</p> <p>12 Q. You're not expressing any opinions in</p> <p>13 Section 4.2 of your expert report, right?</p> <p>14 A. I do not see any opinions, no.</p> <p>15 Q. In Section 4.3 of your expert report, does</p> <p>16 this section contain only factual information?</p> <p>17 A. I believe it is all factual.</p> <p>18 Q. So you looked at Sections 4.0, 4.1, 4.2, and</p> <p>19 now 4.3, and it's all factual information contained</p> <p>20 within those sections, right?</p> <p>21 A. I believe so; that's correct.</p> <p>22 Q. Let's go to Section 5. It doesn't say 5.0,</p> <p>23 but it's 5.0. It says, "Important Infrastructure -</p> <p>24 International Reach of the Rio Grande Basin," on</p> <p>25 Page -- this is Page 14 of Cortez Exhibit 2 (cell</p> |
| <p style="text-align: right;">147</p> <p>1 stretch of river or on our property, for instance,</p> <p>2 would require a permit in order to do that.</p> <p>3 Q. And it's your testimony that there might be</p> <p>4 some permits issued right now by IBWC in that stretch</p> <p>5 for what?</p> <p>6 A. Okay. So if you were going to do a crossing</p> <p>7 of, say, a gas line or something like that, that</p> <p>8 would be one of those things, pumps in the rivers.</p> <p>9 If you have some sort of constructed</p> <p>10 infrastructure that's going to be on the floodplain,</p> <p>11 things of that nature. But there's a long list of</p> <p>12 things that could be considered.</p> <p>13 Q. Are you actually aware of any IBWC permits</p> <p>14 that have been issued in this reach of the Rio Grande</p> <p>15 River at issue?</p> <p>16 A. Not specifically. Speaking in general terms</p> <p>17 of our operations.</p> <p>18 Q. But my question isn't about general. I'm</p> <p>19 asking if you're aware of any IBWC permits for any</p> <p>20 structures in -- between mile marker 275 and 610, if</p> <p>21 you're aware.</p> <p>22 A. I would be aware without being able to give</p> <p>23 specifics of that.</p> <p>24 Q. Is that publicly available information?</p> <p>25 A. I do not know.</p> | <p style="text-align: right;">149</p> <p>1 phone alarm sounding).</p> <p>2 Does Section 5.0 in this expert report</p> <p>3 contain only factual information?</p> <p>4 A. Yes, I believe it's factual information.</p> <p>5 Q. And Section 5.1 of your expert report, does</p> <p>6 this section contain only factual information?</p> <p>7 A. I believe it is all factual.</p> <p>8 Q. Looking next at Section 5.2 of your report,</p> <p>9 does this section also contain only factual</p> <p>10 information?</p> <p>11 A. I believe it is all factual, yes.</p> <p>12 Q. Next, going to Section 5.3 of your report,</p> <p>13 does this section also contain only factual</p> <p>14 information?</p> <p>15 MR. HARRISON: I object on form to this</p> <p>16 line of questions.</p> <p>17 Q. (BY MR. STONE) Go ahead.</p> <p>18 A. I can -- okay. Okay. I wasn't sure if I</p> <p>19 was supposed to stop.</p> <p>20 Q. No, keep going.</p> <p>21 A. Okay. Thank you. I believe it's factual</p> <p>22 except for an instance where I describe, "it is</p> <p>23 likely for one of the penstocks to be plugged,"</p> <p>24 simply because that's speculation or what I'm aware</p> <p>25 of --</p> |

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| <p>150</p> <p>1 Q. Uh-huh. What is the -- so let's talk about 2 -- what is a penstock? 3 A. So a penstock is a structure on the dam that 4 allows the passage of water from the upstream side to 5 the downstream side. 6 Q. How many penstocks are there on the Amistad 7 Dam? 8 A. There is a total of nine as it was 9 constructed. 10 Q. How many of the nine penstocks are owned by 11 the United States? 12 A. Five in the United States. 13 Q. Of the five in the United States, how many 14 of them are operational? 15 A. At the current present moment, two of the 16 penstocks are operational. 17 Q. Operating at maximum capacity, how much 18 water could be released from the Amistad Dam through 19 the two penstocks that are operational? 20 A. Specifically for the U.S.? 21 Q. Uh-huh. 22 A. It would be -- this is just a general gross 23 number -- about 3,500 CFS or 3,000 CFS. 24 Q. So -- 25 A. And that depends on head.</p> | <p>152</p> <p>1 as of this morning, I wouldn't be able to specify. 2 Q. So it's not high enough to reach the 3 spillway crest as of right now, right? 4 A. At present, it is not. 5 Q. So as of present, the only way that you 6 could release water, given the current water levels, 7 would be through the penstocks at Amistad Dam. Is 8 that correct? 9 A. That is correct. 10 Q. And of those penstocks, the U.S. only has 11 two that are operational, right? 12 A. Of the U.S., that is correct, yes. 13 Q. And even if we operated those two at maximum 14 capacity, you would be limited to 3500 CFS? 15 A. For only those two, yes. 16 Q. Now, if you operated -- let's say -- 17 remember, we talked about change priority; we could 18 do all these different things to increase the 19 navigability of the river, right? 20 Okay. So let's say that you get to 21 operate those two penstocks at maximum capacity, 3500 22 CFS. How much, on average, would that raise the 23 water depth on the Rio Grande River? 24 A. And I would like to clarify my answer. 25 There -- my recollection of the dam is often cubic</p> |
| <p>151</p> <p>1 Q. I'm looking at image or Figure 5. Do you 2 see it on the screen? 3 A. I do, yes. 4 Q. And Figure 5 is on page 18 of your expert 5 report, Exhibit -- Cortez Exhibit 2. 6 A. Uh-huh. 7 Q. All right. Now, these tainter gates, can 8 those be opened during flood conditions? 9 A. They can be opened during flood conditions. 10 Q. What about the spillway that's depicted 11 on -- in Figure 5? Could that be used during flood 12 conditions? 13 A. Yes, it can be used during flood conditions. 14 Q. Right now we're at water conservation levels 15 in the Amistad Reservoir, right? 16 A. That is correct, yes. 17 Q. So looking at this image in Figure 5, 18 approximately where is the water level right now? 19 A. It is approximately ten feet above power 20 pool. 21 Q. So it says, "power pool 16%," right here, 22 right? 23 A. Yeah, at 1040 feet. Without looking at the 24 data in the past several days, I know it's 25 approximately ten feet above. But if it's different</p> | <p>153</p> <p>1 meters -- 2 Q. Okay. 3 A. -- per second because that's what we 4 typically use. So at what we were talking about 5 previously, roughly half of the maximum capacity, 6 assuming either generating units would be 240 CMS, or 7 cubic meters per second, roughly half of that would 8 be through the U.S. side of the turbines. So that 9 would be 120. And then if I can use a calculator. 10 Q. Yeah, that's fine. Absolutely. 11 And so just for the record, right now 12 you're pulling out a calculator, and you're doing 13 small calculations right now to figure out what the 14 CFS is, max CFS if we operate at full -- full flow 15 for both of our operational penstocks on the U.S. 16 side. 17 A. And I promise I know how to use a 18 calculator. 19 Q. I believe you. 20 A. Okay. Yeah, so about 4,000, give or change, 21 would be for the U.S. side. 22 Q. So we could -- at the most on the U.S. side 23 we could release 4,000 CFS? 24 A. That is correct, but we would operate both 25 if required. Both being --</p> |

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| <p>154</p> <p>1 Q. If required --</p> <p>2 A. -- U.S. and Mexico.</p> <p>3 Q. Let's set Mexico aside for a moment. Let's</p> <p>4 just -- we just want to focus on the U.S. side.</p> <p>5 How long could you operate releasing</p> <p>6 4,000 CFS through our two penstocks before you ran</p> <p>7 out of water in the Amistad Reservoir?</p> <p>8 A. At current conditions?</p> <p>9 Q. Uh-huh.</p> <p>10 A. I would not be able to give a specific</p> <p>11 answer without doing the math, but it would not be a</p> <p>12 full year just for...</p> <p>13 Q. If we even just open -- if we open the two</p> <p>14 penstocks, we ran 4,000 CFS, we would literally run</p> <p>15 out of water in the Amistad Reservoir in less than a</p> <p>16 year?</p> <p>17 MR. HARRISON: Objection. Form.</p> <p>18 A. Under current conditions without -- ignoring</p> <p>19 the possibility of, say, another hurricane or large</p> <p>20 rainfall event filling the reservoirs and providing</p> <p>21 additional water supply, yes.</p> <p>22 Q. (BY MR. STONE) Okay. Let's say in this</p> <p>23 hypothetical we do release 4,000 CFS, which are</p> <p>24 capacity of the penstocks at the Amistad on the U.S.</p> <p>25 side. What -- how high would that raise the water</p> | <p>156</p> <p>1 order to have a good, accurate topography.</p> <p>2 Q. (BY MR. STONE) Okay. I want to go through</p> <p>3 the data, what we would need. What is a -- what's a</p> <p>4 LiDAR?</p> <p>5 A. LiDAR? So that is a -- it's a laser-based</p> <p>6 data collection system -- or not data. It's a type</p> <p>7 of sensor that uses lasers to determine the distance</p> <p>8 to objects, and it's commonly used to collect</p> <p>9 topography data, you know, above the surface water</p> <p>10 and, in some instances, below the surface water if</p> <p>11 it's not too deep.</p> <p>12 So then using that data and computer</p> <p>13 programs, you would be able to produce a digital</p> <p>14 elevation model, which then would help determine the</p> <p>15 situation that you just proposed.</p> <p>16 Q. How long would it take to do that?</p> <p>17 MR. HARRISON: Objection. Form.</p> <p>18 A. How long to collect the data?</p> <p>19 Q. (BY MR. STONE) Uh-huh.</p> <p>20 A. Based off other experiences in other areas,</p> <p>21 it would be a few months probably to collect the</p> <p>22 data.</p> <p>23 Q. So it's unlikely that we could get the -- in</p> <p>24 your opinion, is it unlikely for us to be able to</p> <p>25 collect the data and run the model to see -- to see</p> |
| <p>155</p> <p>1 level on average on the Rio Grande River?</p> <p>2 A. I would not be able to specify without doing</p> <p>3 additional analysis.</p> <p>4 Q. Well, ballpark: Would it raise it by a</p> <p>5 hundred feet?</p> <p>6 MR. HARRISON: Objection. Form.</p> <p>7 A. Making the assumption if the goal or target</p> <p>8 is a hundred feet, it is unlikely.</p> <p>9 Q. (BY MR. STONE) Could it -- if you ran it</p> <p>10 4,000 CFS, could you raise the Rio Grande -- on</p> <p>11 average, the Rio Grande River by 50 feet?</p> <p>12 MR. HARRISON: Objection. Form.</p> <p>13 A. Again, I couldn't give you specifics. It</p> <p>14 would require study and the specific cross-sections</p> <p>15 you're looking at to give a good engin -- not</p> <p>16 engineering, but a good scientific answer.</p> <p>17 Q. (BY MR. STONE) But it's possible that you</p> <p>18 could -- if you wanted, you could figure out exactly</p> <p>19 how high for the whole stretch of the Rio Grande</p> <p>20 River you could raise that water depth if you</p> <p>21 released the 4,000 CFS from our two operational</p> <p>22 penstocks at the Amistad Dam, right?</p> <p>23 MR. HARRISON: Objection. Form.</p> <p>24 A. For the entire stretch, again, I would need</p> <p>25 additional data, LiDAR, things of that nature in</p> | <p>157</p> <p>1 what the impact of that 4,000 CFS would be on water</p> <p>2 levels before our trial on August 6th?</p> <p>3 MR. HARRISON: Objection. Form.</p> <p>4 A. There is existing data sets. There is a</p> <p>5 program that's -- I believe it's a consortium of</p> <p>6 federal agencies called 3DEP, so it's a 3-D</p> <p>7 elevation.</p> <p>8 Q. (BY MR. STONE) 3DEP.</p> <p>9 A. The goal really was to produce a elevation</p> <p>10 model for the entire nation, and part of that they</p> <p>11 have broken it into sections to collect LiDAR data</p> <p>12 like that.</p> <p>13 So the data that you're proposing for</p> <p>14 that may have been -- already been collected or</p> <p>15 existing, and the Commission has produced studies and</p> <p>16 such that may also be able to input into that. So I</p> <p>17 couldn't speculate. To your point, the data may</p> <p>18 exist, so I couldn't --</p> <p>19 Q. So we may even already have the data; we</p> <p>20 just need to collect it to run the modeling for it?</p> <p>21 MR. HARRISON: Objection. Form.</p> <p>22 A. Right. You would have to process the data,</p> <p>23 assuming it hasn't been processed, and then do the</p> <p>24 analysis with using that data.</p> <p>25 Q. (BY MR. STONE) So I'm a lawyer; help me.</p> |

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| <p>158</p> <p>1 How would you describe the data that you</p> <p>2 would need collectively to be able to run that</p> <p>3 analysis?</p> <p>4 A. If you could restate the goal of the</p> <p>5 analysis, just so --</p> <p>6 Q. Yeah, the goal of the analysis is to</p> <p>7 determine how -- the impact on water depth --</p> <p>8 A. Uh-huh.</p> <p>9 Q. -- along the stretch of the Rio Grande River</p> <p>10 at issue here if you release 4,000 CFS from the</p> <p>11 Amistad Dam, just until you run out of water.</p> <p>12 A. Okay. So the start of -- as I said, you</p> <p>13 would have to set up some sort of elevation model</p> <p>14 that may already exist within existing projects, or</p> <p>15 the data may have to be collected. I couldn't say</p> <p>16 the disposition of that data.</p> <p>17 Q. So I would just say, "I want" -- "IBWC, do</p> <p>18 you guys have any elevation data on the Rio Grande</p> <p>19 River?"</p> <p>20 A. But assuming you have that information</p> <p>21 available to you, it would then be loaded into some</p> <p>22 sort of hydraulic software, like some sort of</p> <p>23 hydraulic software that's used to do hydraulic</p> <p>24 calculations. And the purpose of that software is to</p> <p>25 predict or estimate the water surface elevations.</p> | <p>160</p> <p>1 information?</p> <p>2 MR. HARRISON: Objection. Form.</p> <p>3 Q. (BY MR. STONE) You know what, strike that.</p> <p>4 This is the one where you just told me about the</p> <p>5 plug. This is 5.3, about one of the penstocks being</p> <p>6 plugged, I believe.</p> <p>7 A. Uh-huh.</p> <p>8 Q. And what is the basis for your opinion that</p> <p>9 one of the U.S. penstocks will be plugged?</p> <p>10 A. Okay. The basis for -- it's not an opinion</p> <p>11 necessarily. It's just, in operating a dam, we</p> <p>12 regularly have meetings as well as with stakeholders,</p> <p>13 and this is information that we have conveyed to the</p> <p>14 public as well.</p> <p>15 Q. I see. You know what, before we move on,</p> <p>16 I'm really curious about the penstocks now. So more</p> <p>17 questions about penstocks.</p> <p>18 How many of the penstocks on the Mexico</p> <p>19 side are currently operational?</p> <p>20 A. To my knowledge, all but one of them. I</p> <p>21 believe one of them is just plugged since</p> <p>22 construction.</p> <p>23 Q. Is the CFS capacity the same on the Mexican</p> <p>24 penstocks as it is for the U.S. penstocks?</p> <p>25 A. I believe it is similar, yes.</p> |
| <p>159</p> <p>1 And in the case that if your grade of</p> <p>2 data is dense enough, then you would be able to give</p> <p>3 a more accurate response of the full extents and</p> <p>4 depths for the reach that we're talking about.</p> <p>5 And this is a similar process to the</p> <p>6 information I provided in my report for Eagle Pass</p> <p>7 where their project scope was limited to the urban</p> <p>8 extents.</p> <p>9 Q. Was it 3DEEP or 3DEP?</p> <p>10 A. So 3-D-E-P.</p> <p>11 Q. D-E-P.</p> <p>12 A. Yeah, mostly just DEP is what I hear it</p> <p>13 referred to as.</p> <p>14 Q. And LiDAR. Can you spell LiDAR?</p> <p>15 A. It was also -- just the acronym?</p> <p>16 Q. Yeah, uh-huh.</p> <p>17 A. L-I-D-A-R.</p> <p>18 Q. Okay. L-I-D-A-R, okay.</p> <p>19 A. I thought you wanted the acronym for it.</p> <p>20 Never mind.</p> <p>21 Q. All right. I think we are at Section 5.3.</p> <p>22 A. Okay.</p> <p>23 Q. For Section 5.3 of your expert report, which</p> <p>24 is page 18 of Cortez Exhibit 2, are there any -- is</p> <p>25 all the information contained in this section factual</p> | <p>161</p> <p>1 Q. So if we ran all six -- strike that.</p> <p>2 There are six operational penstocks</p> <p>3 right now at the Amistad Dam?</p> <p>4 A. Operational, that -- it seems like an</p> <p>5 accurate count, yes.</p> <p>6 Q. Okay. If we ran all six penstocks at</p> <p>7 maximum capacity, how many CFS could we release from</p> <p>8 the Amistad Dam?</p> <p>9 A. Okay. So first, we would not operate all of</p> <p>10 them at the same time. So with the design of the dam</p> <p>11 or the construction of the dam, we would not operate</p> <p>12 like the irrigation penstock that's not on a</p> <p>13 generated turbine.</p> <p>14 At the same time, we are also generating</p> <p>15 energy. That's just a -- with how the dam was</p> <p>16 constructed, so...</p> <p>17 Q. So how many penstocks could you -- for both</p> <p>18 the U.S. and Mexico side, just simultaneously, how</p> <p>19 many could you operate at the same time?</p> <p>20 A. If you were going full out, it would be the</p> <p>21 240 CMS, thereabouts, not -- ignoring efficiencies.</p> <p>22 Q. Sorry. Let's take it one step at a time.</p> <p>23 How many of the -- numerically, how many</p> <p>24 penstocks?</p> <p>25 A. It would be four penstocks.</p> |

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| <p>162</p> <p>1 Q. Four penstocks, the max penstocks we can 2 open up at once, or we would open at once at the 3 Amistad Dam, right? 4 So what will be the CFS if we ran four 5 penstocks at full capacity? 6 A. Approximately 8500 CFS. 7 Q. 8500 CFS, approximately. 8 A. And I believe in my report I say 8400 CFS to 9 7,000 CFS. 10 Q. Okay. How long, approximately, would it 11 take before you ran out of water in the Amistad 12 Reservoir if you operated at 8400 CFS at a constant 13 rate? 14 MR. HARRISON: Objection. Form. 15 A. Again, I would want to be able to actually 16 run the numbers and sit down in front of a computer 17 and spreadsheet, but it would be a few months -- 18 Q. (BY MR. STONE) A few months. 19 A. -- and highly dependent on what your inflows 20 are, right? If it starts raining in June, that's 21 going to completely change our response or what's 22 available for that. 23 Q. But potentially is -- is it also fair that 24 as the water elevation in the reservoir drops, so 25 does the thorput -- throughput through the penstocks?</p> | <p>164</p> <p>1 depth by releasing 8400 -- I know it would decline 2 over time -- CFS from Amistad Dam, you would only be 3 able to do that for a couple of months before you ran 4 out of water in the Amistad Reservoir, right? 5 MR. HARRISON: Objection. Form. 6 A. A clarifying question because I think we may 7 have switched at some point. There is -- 8 Q. (BY MR. STONE) Sure. I -- probably my 9 fault, so please ask the clarifying question. 10 A. At the start we were talking about just the 11 U.S. turbines, And then we were talking about -- may 12 have been talking about all the turbines. So right 13 now are you talking about all the turbines 14 operationally or just the U.S. turbines, because 15 that's... 16 Q. (BY MR. STONE) Yeah, let's do both. That's 17 a -- thank you for asking that clarifying question. 18 That's great. So let's start with just the U.S. 19 ones. 20 So if we ran the two U.S. ones at 3500 21 CFS and we're going to run out of water in a little 22 less than a year, how high would that release, that 23 constant release from Amistad Dam, raise the water 24 depth in Eagle Pass where the floating buoys are 25 located?</p> |
| <p>163</p> <p>1 A. That is correct and accurate, yes. 2 Q. What impact would that have on the amount of 3 CFS that you could output? 4 A. It drops or declines. 5 Q. So you wouldn't be able to actually continue 6 to operate at 8400 as you drained out the Amistad 7 res -- as we empty the Amistad Reservoir, your CFS is 8 going to decline as that water level in the reservoir 9 drops? 10 A. That is correct. It's a function of head or 11 the height above your intake. 12 Q. I see. If we released 8400 CFS from Amistad 13 Dam, how high -- just how high, approximately, do you 14 think the water depth would be in Eagle Pass where 15 the floating buoys are currently located? 16 MR. HARRISON: Objection. Form. 17 A. I wouldn't be able to speak specifically to 18 the Eagle Pass, the buoys that you refer to. 19 Q. (BY MR. STONE) Uh-huh. 20 A. Just based off my knowledge of operations 21 and such, it would be, in terms of rising, five or 22 six feet. But that's just a quick recollection of 23 what I have in my head. 24 Q. So potentially, if we could get the water 25 level in Eagle Pass up to maybe five, six feet of</p> | <p>165</p> <p>1 MR. HARRISON: Objection. Form. 2 A. This is, again, just from my recollection of 3 water operations over time. For that it would be 4 probably four to five feet, three to four -- I mean, 5 it's hard to say exactly without doing -- and to that 6 point, it also varies greatly with the actual 7 cross-section. So I could go, "Here it's six feet 8 deep," and then travel down 20 feet down the river, 9 and it's eight feet deep. So it varies. 10 Q. So right now around the buoys I want you to 11 assume that it is 18 inches deep, the water level, 12 okay? 13 A. Okay. 14 Q. So assuming that's true, would you be 15 raising it to four or five feet with that 3500-CFS 16 release, or would that be in addition to the 17 18 inches of water? 18 MR. HARRISON: Objection. Form. 19 A. Okay. So your -- to raise the water would 20 be your delta of your release. So if I'm at already 21 presently 20, going to 120, then that 18 inches that 22 you gave me in your hypothetical is based off of 20, 23 and the delta of those two would be a hundred, so 24 then increase in water level would be based on the 25 hundred.</p> |

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| <p>166</p> <p>1 Q. (BY MR. STONE) So we'd go from 18 inches to 2 six and a half feet at most?</p> <p>3 MR. HARRISON: Objection. Form.</p> <p>4 A. Within normal -- normal being non-flooding 5 conditions, that region of the river -- talking again 6 Eagle Pass --</p> <p>7 Q. (BY MR. STONE) Uh-huh.</p> <p>8 A. -- area is generally under eight feet in 9 depth. But, again, that can depend on the exact 10 cross-section depending on how the river widens or 11 narrows through the area.</p> <p>12 Q. Right. But what I'm trying to understand 13 is, if we released the 3500 CFS from Amistad Dam, a 14 moment ago you testified that you believed it would 15 raise the water level four or five feet possibly in 16 the Eagle Pass region.</p> <p>17 A. Assuming that for some reason Amistad was at 18 zero, not releasing anything. I think that's the 19 nuance there.</p> <p>20 Q. Okay. And so the water level would -- it's 21 now -- now we're up to four or five feet water level, 22 in Eagle Pass. Sorry, I'm getting words out.</p> <p>23 So now let's switch it up, and let's say 24 that that was for the U.S. release. So let's switch 25 it up and talk about like what if Mexico and the U.S.</p> | <p>168</p> <p>1 steady state. So if you then were going to change 2 that operation, that would be the basis for my 3 response. So there's a lot of assumptions that would 4 have to go into making that response in the terms of 5 specifically rising.</p> <p>6 Q. (BY MR. STONE) Would releasing water just 7 for navigation from the Amistad Dam be counter to the 8 treaty requirement to keep most of the water in the 9 uppermost portion of the reservoir?</p> <p>10 A. Were you going to show or --</p> <p>11 Q. Oh, I'm sorry. I --</p> <p>12 A. I wasn't sure.</p> <p>13 Q. This thing, I'm sorry.</p> <p>14 A. I wasn't sure if you were showing me 15 something.</p> <p>16 Q. Yeah. No, I'm not. I'm not.</p> <p>17 A. Okay. Cool. So your question, if you could 18 restate it?</p> <p>19 Q. Yes. Would releasing water for the purposes 20 of navigation run counter to the provisions in the 21 treaty requiring the water to be primarily held in 22 the uppermost region?</p> <p>23 MR. HARRISON: Objection. Form.</p> <p>24 A. The treaty contemplates that you can release 25 water for -- out of Amistad specifically for</p> |
| <p>167</p> <p>1 release. So we had four penstocks operating at that 2 8400 level, 8400-CFS level. How high do you think 3 that would raise the water level in Eagle Pass?</p> <p>4 MR. HARRISON: Objection. Form.</p> <p>5 A. When you say "raise," what do you mean? 6 Because my assumption is that there is a -- you know, 7 there is a static level, so it's at 1. And when you 8 raise it, it would be to a certain level, but that 1 9 is going to be based off of whatever is coming out of 10 Amistad or any intervening flows coming into the 11 river.</p> <p>12 Q. (BY MR. STONE) So is it not possible for -- 13 without additional data about intervening water 14 flows, for you to guesstimate what the new water 15 depth would be in Eagle Pass if you were to release 16 8400 CFS from Amistad Dam?</p> <p>17 MR. HARRISON: Objection. Form.</p> <p>18 A. To give a good sign of, you know, response 19 with a basis of data, I would want to be able to 20 review the current conditions all along the stretch 21 of the river, all the inputs, all the outputs, and 22 then, of course, resolving the question of where is 23 it right now, right?</p> <p>24 So we've been releasing around under 20 25 for a few months now, so the river is sort of in a</p> | <p>169</p> <p>1 beneficial use, but also for the storage of the 2 waters in a downstream reservoir, which in this case 3 would be Falcon.</p> <p>4 Q. (BY MR. STONE) I see. So it wouldn't --</p> <p>5 THE REPORTER: Did you say, "Which in 6 this case would be" --</p> <p>7 THE WITNESS: Falcon.</p> <p>8 THE REPORTER: Falcon. Thank you.</p> <p>9 Q. (BY MR. STONE) So such a release 10 wouldn't -- such a release as we are talking about 11 right now about releasing 3500 CFS for the purposes 12 of navigation, that wouldn't run counter to the 13 treaty requirement about keeping most of the water in 14 the uppermost reservoir?</p> <p>15 MR. HARRISON: Objection. Form.</p> <p>16 A. Assuming that is the request that we receive 17 from Texas or Mexico, I don't see any reason we would 18 say anything in regards to that.</p> <p>19 Q. (BY MR. STONE) So if the TCEQ watermaster 20 sent you a request to release 3500 CFS effective 21 immediately and until you run out of water in the 22 Amistad Reservoir from the Amistad Dam, 3500 CFS 23 released through the penstocks, you guys would just 24 go ahead and do it?</p> <p>25 MR. HARRISON: Objection. Form.</p> |

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| <p>170</p> <p>1 A. To be specific, the watermaster could only 2 order the water that is owned by the United States 3 and the State of Texas through that. They would not 4 be able to call for the release of water in Mexico. 5 So they couldn't empty Amistad under that -- 6 Q. (BY MR. STONE) I see. 7 A. -- on that statement. 8 Q. So earlier when you talked about emptying 9 the Amistad Reservoir of water, were you only 10 referring to the U.S.'s apportionment of the water in 11 the Amistad Reservoir or did you mean all of the 12 water in the Amistad Reservoir? 13 MR. HARRISON: Objection. Form. 14 A. I would have -- 15 Q. (BY MR. STONE) Wait, wait. Before you 16 answer. 17 MR. STONE: State the basis for your 18 objection. 19 MR. HARRISON: Misstates prior 20 testimony. 21 MR. STONE: Okay. 22 Q. (BY MR. STONE) Go ahead. 23 A. I would have to know the exact question that 24 you asked as to whether or not it was to the United 25 States portion or a general statement on the draining</p> | <p>172</p> <p>1 Q. Ah, okay. So we wouldn't have a year, would 2 we? 3 MR. HARRISON: Objection. Form. 4 A. I didn't hear you, sorry. 5 Q. (BY MR. STONE) So we would have much less 6 than a year, right, before we ran out of Texas's 7 water? 8 MR. HARRISON: Objection. Form. 9 A. The majority of the water at present is 10 owned by Texas. 11 Q. (BY MR. STONE) Okay. 12 A. I think it's 20 percent, 10 percent, 13 thereabouts, of the conservation storage, but I 14 couldn't give -- like I said, I gave a general answer 15 on the time period. To give something more 16 scientifically, I would have to look at the current 17 storage owned by Texas, the release rates that we 18 would do, and things like that. 19 Q. So you said we were currently about ten feet 20 above power pool level, right? 21 A. That is correct, yes. 22 Q. And that's about -- so that would be about 23 1,050 feet? 24 A. Yes. 25 Q. And, of that, I think you said 10 percent --</p> |
| <p>171</p> <p>1 of Amistad and for what you were -- as answering. 2 Q. You testified earlier that if you released 3 3500 CFS from the Amistad Dam, you would run out of 4 the water in the Amistad Reservoir in a little less 5 than a year. Do you remember that? 6 MR. HARRISON: Objection. Form. 7 A. I did say that, yes. 8 Q. (BY MR. STONE) Okay. 9 MR. STONE: Sorry. State your 10 objection. 11 MR. HARRISON: Misstates prior 12 testimony. 13 Q. (BY MR. STONE) You did state that, though, 14 right? 15 A. In this general sense, correct. 16 Q. Okay. Now, when you said we would run out 17 of water in the Amistad Reservoir within a year, did 18 you mean all the water, or did you mean just water 19 held by the U.S.? 20 MR. HARRISON: Objection. Form. 21 A. I would have to -- back to when we were 22 making that discussion -- 23 Q. (BY MR. STONE) Uh-huh. 24 A. -- we may not have distinguished between 25 Texas water and Mexico water.</p> | <p>173</p> <p>1 you said ten-twenty. What did you mean by 2 ten-twenty? 3 A. So the way that we -- one of the ways that 4 we report water ownership data is relative to how 5 much water either country could own at the max. So 6 if they -- dam was completely full, you know, one of 7 the ways that we report that information is that of 8 that full amount, the U.S. has 20 percent. 9 Q. So when you say, "of the full amount," is 10 that at the 100 percent level or is that at this like 11 162 percent maximum water surface level? 12 A. The ownership by the countries is only to 13 the conservation pool. Above that, there is no 14 interest or -- between the two countries. 15 Q. Got it. So as of -- as of right now, if the 16 water level is at 100 percent, 20 percent would be 17 for Texas and 10 percent would be for Mexico? 18 A. Sorry, say that again. 19 Q. So looking at this, the 100 percent, that 20 top of the conservation pool, if that was the water 21 level, 20 percent would be allocated to Texas and 22 10 percent would be allocated to Mexico? 23 A. No. 24 Q. Okay. 25 A. If the dam was completely full --</p> |

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| <p style="text-align: right;">174</p> <p>1 Q. Uh-huh.</p> <p>2 A. -- at elevation three hundred and forty-four</p> <p>3 six --</p> <p>4 Q. Yes.</p> <p>5 A. -- it is split -- let me find it -- it's</p> <p>6 about 57 percent U.S. There's rules where they can</p> <p>7 go above that, but if it's completely full, that's</p> <p>8 the number. 56.2 percent --</p> <p>9 Q. Okay.</p> <p>10 A. -- would be owned by the U.S.</p> <p>11 Q. So of the 1,050 feet of water -- hold.</p> <p>12 Strike that.</p> <p>13 Are evaporation losses higher in Falcon</p> <p>14 than in Amistad?</p> <p>15 A. Restate the order, just to make sure I'm --</p> <p>16 Q. Are evaporation losses higher in Falcon than</p> <p>17 in Amistad in general?</p> <p>18 A. In general terms, Falcon has a higher</p> <p>19 surface area, which then translates to greater</p> <p>20 evaporation losses.</p> <p>21 Q. So if you move water from Amistad for</p> <p>22 navigation, even if you capture in Falcon, you would</p> <p>23 still lose more water due to bank storage and</p> <p>24 evaporation, right?</p> <p>25 A. There would be losses associated with the</p> | <p style="text-align: right;">176</p> <p>1 water. So an order is provided to us from Mexico and</p> <p>2 the United States. We then operate the dams to</p> <p>3 fulfill that order. And either country can generate</p> <p>4 water or use its infrastructure to convey that water</p> <p>5 order.</p> <p>6 So, for instance, I know as of right now</p> <p>7 I think it's 12 hours where they switch. So it's 12</p> <p>8 hours generated through the U.S. side, 12 hours</p> <p>9 through the Mexican side. So a lot of your questions</p> <p>10 are -- while theoretically are possible, don't relate</p> <p>11 to how we operate the reservoirs, because we're --</p> <p>12 we're using both.</p> <p>13 Q. (BY MR. STONE) I understand. So you</p> <p>14 couldn't operate -- it wouldn't be possible to just</p> <p>15 operate the two U.S. penstocks releasing 3500 CFS</p> <p>16 nonstop. You wouldn't be able to do that because of</p> <p>17 the Mexican penstocks and their turn for releases.</p> <p>18 Is that accurate?</p> <p>19 A. That is part of the determination. And it</p> <p>20 all -- I mean, it's -- if you have a unit off. Let's</p> <p>21 say a unit goes off for maintenance. That's going to</p> <p>22 take that one out.</p> <p>23 So it's -- it's a function of what is</p> <p>24 operating, right? You may have units or maintenance</p> <p>25 requirements. What is the order and requirements --</p> |
| <p style="text-align: right;">175</p> <p>1 conveyance of water from Amistad to Falcon, including</p> <p>2 the two that you named right now.</p> <p>3 Q. If the U.S. -- let's say Texas -- strike</p> <p>4 that. Let me start again.</p> <p>5 If Texas -- strike that.</p> <p>6 If the two U.S. penstocks operated at</p> <p>7 full capacity and released 3500 CFS, approximately</p> <p>8 how long could they operate at that level before, at</p> <p>9 current water levels, you ran out of water that is</p> <p>10 allocated to Texas?</p> <p>11 MR. HARRISON: Objection. Form.</p> <p>12 A. Okay. The nuance with that question is that</p> <p>13 the penstocks on the United States side and the</p> <p>14 penstocks in Mexico are at different elevations. So</p> <p>15 purely hypothetical, going along with your statement,</p> <p>16 there can be an instance where, in order to evacuate</p> <p>17 all of U.S. water, we would have to utilize the U.S.</p> <p>18 irrigation valve -- or, sorry, not the -- the Mexican</p> <p>19 irrigation valve to convey the waters.</p> <p>20 Q. (BY MR. STONE) Well, assume they weren't</p> <p>21 willing to cooperate. How long would it take --</p> <p>22 MR. HARRISON: Object --</p> <p>23 Q. (BY MR. STONE) -- with just our two?</p> <p>24 MR. HARRISON: Objection. Form.</p> <p>25 A. We op -- we operate the dams to release the</p> | <p style="text-align: right;">177</p> <p>1 or even if we're going to operate the turbines, if</p> <p>2 it's -- if the demand isn't high enough that it makes</p> <p>3 sense for us to operate those tur -- those releases,</p> <p>4 then we would use the Mexican irrigation gate. It's</p> <p>5 all in operations depending on what's actually being</p> <p>6 requested on a given day by the two stakeholders.</p> <p>7 Q. Hypothetical.</p> <p>8 A. Uh-huh.</p> <p>9 Q. Assume that you receive an order to release</p> <p>10 3500 CFS of water from the Amistad Dam until you run</p> <p>11 out of water for Texas. It's allocated to Texas.</p> <p>12 How long do you think that would take?</p> <p>13 MR. HARRISON: Objection. Form.</p> <p>14 Q. (BY MR. STONE) Wait, wait. Before you</p> <p>15 answer.</p> <p>16 MR. STONE: State your objection.</p> <p>17 MR. HARRISON: Calls for speculation.</p> <p>18 MR. STONE: In a hypothetical?</p> <p>19 Q. (BY MR. STONE) Go ahead and answer.</p> <p>20 A. Okay. Making a lot of assumptions on the</p> <p>21 water and realizing that there could be a situation</p> <p>22 where there is water released -- were we just only</p> <p>23 using the U.S. penstocks or just in general?</p> <p>24 Q. In general.</p> <p>25 A. Oh, in general. Okay. Assuming no drastic</p> |

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| <p>178</p> <p>1 inflows and assuming a dry inflow hydrology for 2 inflows into reservoirs, it would be -- it would be 3 months, but I would need to sit down at a spreadsheet 4 to model it, so to speak. 5 Q. Okay. Same hypothetical, except this time 6 it's 8400 CFS. How long could you operate at that 7 until Tex -- until you ran out of water allocated to 8 Texas? 9 MR. HARRISON: Objection. Form. 10 A. Again, it's the same response. I would have 11 to look at the actual data and run a spreadsheet 12 calculation to say how long their water would last 13 based off the current, today, ownership in Amistad. 14 Q. (BY MR. STONE) Do you think that it would 15 be a matter of months? 16 MR. HARRISON: Objection. Form. 17 A. It would be months, but I couldn't say how 18 many months. 19 Q. (BY MR. STONE) Is it possible it could be 20 weeks? 21 MR. HARRISON: Objection. Form. 22 A. I do not believe it would be weeks, just 23 with my quick head -- 24 Q. (BY MR. STONE) Okay. 25 A. -- calculation. But give me a computer.</p> | <p>180</p> <p>1 A. I believe they're all factual statements, 2 yes. 3 Q. Okay. So we've gone through Sections 5.0, 4 5.1, 5.2, 5.3, 5.4, and 5.5. And is it fair to say 5 that the only expert opinion that you expressed had 6 to do with the plugging of one of the penstocks at 7 the Amistad Dam? 8 MR. HARRISON: Objection. Form. 9 A. Expert opinion in the sense that the 10 penstock -- I provide information on what is expected 11 to happen, not what necessarily has happened or -- 12 THE REPORTER: I can't hear you. I need 13 you to speak up, please. 14 A. So in the sense that as it relates to the 15 penstocks, I provide information on what is expected 16 to happen but not what has happened or what -- you 17 know, there could be changes. 18 Q. So that's not -- so just so I'm clear, so 19 the penstock testimony you gave isn't actually expert 20 opinion that you -- isn't an expert opinion that you 21 have in this case? 22 A. No, I don't believe so. 23 Q. So is it fair to say that there are no 24 expert opinions contained in Section 5 of the report? 25 MR. HARRISON: Objection. Form.</p> |
| <p>179</p> <p>1 THE REPORTER: I can't hear you. 2 THE WITNESS: I would not be able -- 3 sorry. What did I say? 4 THE REPORTER: Can you repeat? 5 A. If you could ask the question again. 6 Q. (BY MR. STONE) Okay. Why don't I -- how 7 about I ask the question again, okay. 8 Could it be a matter of weeks before -- 9 operating at 8400-CFS release, before you ran out of 10 water allocated to Texas? 11 MR. HARRISON: Objection. Form. 12 A. I do not believe it would be weeks. 13 Q. (BY MR. STONE) Okay. So let's go to 14 Section 5.4 of your expert report. In Section 5.4, 15 which begins on page 19 of Cortez Exhibit 2, does 16 this section only contain factual statements? 17 A. I believe it's all factual statements, 18 correct. 19 Q. There's no opinion -- there's no expert 20 opinions contained in Section 5.4 of your expert 21 report, right? 22 A. I do not see any opinions, no. 23 Q. Okay. Moving on to Section 5.5 of your 24 expert report. Does this section only contain 25 factual statements as well?</p> | <p>181</p> <p>1 A. I believe it is all factual, yes. 2 Q. (BY MR. STONE) Okay. So let's go to 3 Section 6. And 6 is just one section. 4 Are the -- in Section 6 of your expert 5 report, is this only factual information? 6 A. I believe it is all factual information, 7 yes. 8 Q. Are there any -- do you see any expert 9 opinions being expressed in Section 6 of your report? 10 A. I do not see any, no. 11 Q. Do you remember earlier this morning when I 12 asked you about whether or not the Rio Grande River 13 could be thought of as a highway of commerce? 14 A. I do. I remember. 15 Q. And you mentioned that the water itself 16 might be -- because of its use for irrigation and 17 other purposes, might be thought of as commerce. Do 18 you remember that? 19 A. I do believe, yes. 20 Q. Are you aware that the USA expressly 21 disclaimed that position during the Fifth Circuit 22 oral arguments last week? 23 MR. HARRISON: Objection. Form. 24 A. I'm not aware, no. 25 Q. (BY MR. STONE) If that were true, would a</p> |

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| <p>182</p> <p>1 change by IBWC that impacts water allocation priority 2 and use -- would that cause a negative monetary 3 impact to users who lose some ability to utilize 4 previous volumes of water that are allocated to them? 5 MR. HARRISON: Objection. Form. 6 A. Okay. A few clarifying questions. To say 7 if that is true, you're referring to? 8 Q. (BY MR. STONE) The water itself being 9 commerce -- 10 A. Okay. And that being the determination -- 11 Q. -- or mo -- think of money. 12 A. And there was earlier saying was I aware of 13 a determination -- 14 Q. Right. So I'm switching. I wanted to 15 switch back. 16 A. Not that that is true. 17 Q. Right. Set aside like -- but if it were 18 true -- like let's assume that that is true, what you 19 were thinking about earlier -- it's a really 20 interesting idea. So if that's true, would that 21 change by IBWC impact water alloca -- that impacts 22 water allocation priority and use, would that 23 repurposing of water cause a negative monetary impact 24 to users who lose some ability to utilize previous 25 volumes of water that have been allocated to them?</p> | <p>184</p> <p>1 make the determination whether or not there is water 2 available for changing allocation or something of 3 that nature. 4 Q. (BY MR. STONE) So, yes, it would be true, 5 but it wouldn't be you guys; it would be the TCEQ 6 watermaster that would be making that decision that 7 results in a negative monetary impact on users who 8 lose some ability to utilize the previous volumes of 9 water that are allocated to them? 10 MR. HARRISON: Objection. Form. 11 A. That's entirely dependent on how that's 12 executed by the State, whether or not there is a 13 judgment of a negative impact. 14 Q. (BY MR. STONE) Okay. I want -- I want to 15 go to Section 7 of your report. This is page 24 of 16 Cortez Exhibit 2. 17 Are the -- is the information contained 18 in Section 7 of your expert report all factual 19 information? 20 MR. HARRISON: Objection. Form. 21 A. For Section 7 it appears to be all factual 22 information, yes. 23 Q. (BY MR. STONE) You know what, I messed up 24 because I said Section 7, but I should have said 25 Section 7.0. Did you understand me to mean</p> |
| <p>183</p> <p>1 MR. HARRISON: Objection. Form. 2 A. I believe what I -- you had proposed was the 3 concept that the water -- well, my proposal or 4 thought based off what you expressed was that the 5 water itself is -- has an aspect of commerce, right, 6 because it is used for development of products and 7 such, which is -- then goes into commerce and 8 production and selling. So I'm not sure how -- what 9 would be changing in that case or, I guess, if you 10 could expand. 11 Q. (BY MR. STONE) Okay. So if the water 12 itself is money, think of it -- the water -- under 13 this -- under this kind of theory, the water itself 14 is the commerce, the water is money, right? And it's 15 currently allocated certain volumes to certain 16 people, right? 17 A. That is correct, yes. 18 Q. Okay. So if that were the case, then any 19 change in that water allocation for priority in use, 20 that would have a negative monetary impact on those 21 individuals who have a preexisting water allocation 22 to them, right? 23 MR. HARRISON: Objection. Form. 24 A. So the allocation process for that in 25 general would be subject to the watermaster. So they</p> | <p>185</p> <p>1 Section 7.0 in my prior question? 2 A. Yes. 3 Q. Okay. Perfect. So are there any -- is it 4 fair to say that there are no expert opinions 5 expressed by you in Section 7.0 of your expert 6 report? 7 MR. HARRISON: Objection. Form. 8 A. I do not see any expert opinions provided. 9 Q. (BY MR. STONE) In Section 7.1 of your 10 expert report, is the information contained in this 11 section factual -- all factual information? 12 MR. HARRISON: Objection. Form. 13 A. 7.1 appears to be all factual information. 14 Q. (BY MR. STONE) Is the information contained 15 in Section 7.2 of your expert report all factual 16 information? 17 MR. HARRISON: Objection. Form. 18 A. In Section 7.2, I -- it is based off factual 19 information, but I do see instances where I'm 20 providing a judgment based upon my review of the 21 data, if that is -- 22 Q. (BY MR. STONE) Okay. 23 A. -- falls under your criteria. 24 Q. Yes. So let's home in on those. Where in 25 Section 7.2 are you expressing an opinion?</p> |

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| <p>186</p> <p>1 A. So I do note that after reviewing the flow 2 records at Rio Grande, Eagle Pass, I state that it is 3 evident that the Rio Grande can vary significantly 4 from year to year. I make a statement about where 5 the water comes from. 6 Q. Well, let's stop, though, and start with the 7 first one here. 8 So you've reviewed the flow records from 9 Rio Grande for the Rio Grande at Eagle Pass, right? 10 A. That is correct, yes. 11 Q. Okay. And you say that it's evident that 12 flows in "the Rio Grande can vary significantly from 13 year to year," right? 14 A. That is correct, yes. 15 Q. Now, is that variance captured in the data 16 that is collected from the Texas stream gage at Eagle 17 Pass? 18 A. Yes, that is what I'm showing in Figures -- 19 or Figure -- Figures 8 and Figure 9, which is 20 describing the vary -- the variance in the river 21 prior to construction of Amistad Dam. 22 Q. So it's just a fact that the flows in the 23 Rio Grande River at Eagle Pass can vary significantly 24 from year to year, right? 25 MR. HARRISON: Objection. Form.</p> | <p>188</p> <p>1 but a statement that this section of the river is 2 highly regulated due to the construction of Amistad 3 Dam, which led to a much narrower operating range. 4 Q. Where is that sentence? 5 A. First sentence of page 27, last paragraph 6 above the figure. 7 Q. Yeah, "The second figure shows that after 8 construction of Amistad Dam, the stream becomes" -- 9 THE REPORTER: I need you to slow down, 10 please. 11 Q. (BY MR. STONE) So the first sentence of the 12 final paragraph on page 27 of your expert report 13 says, "The second figure shows that after 14 construction of Amistad Dam, the stream becomes 15 highly regulated which a much narrower -- which a 16 much narrower operating range," right? 17 A. There is a typo in that sentence, but yes, 18 that's what it says. 19 Q. What is the typo? 20 A. I believe it should say, "the stream becomes 21 highly regulated" -- "The second figure shows that 22 after construction of the Amistad Dam, the stream 23 becomes highly regulated with a much narrower 24 operating range." 25 Q. What do you mean by "highly regulated"?</p> |
| <p>187</p> <p>1 A. I would consider that to be factual, yes. 2 It -- 3 Q. (BY MR. STONE) What's the -- 4 A. -- I am making a judgment on -- there's no 5 specific definition of "varying significantly." I am 6 making a judgment on that it is varying 7 significantly. 8 Q. What do you mean when you say then -- okay. 9 So I understand now it's the word "vary 10 significantly" that's a subjective term, and that's 11 what you mean when you say that you are rendering an 12 opinion in that sentence. Is that fair? 13 A. Correct. 14 Q. What do you -- okay. What other -- I agree 15 with you. So let's keep going. 16 What other -- what other opinions do you 17 have in Section 7.2 that you flagged? 18 A. I mean, I make similar judgments on what is 19 the driest period, wettest period, and things like 20 that -- 21 Q. Okay. Where -- 22 A. -- based off my review of the data. That's 23 in the second paragraph in the middle. 24 And then I make a determination in the 25 last paragraph on that page -- or not determination</p> | <p>189</p> <p>1 A. Is where my -- I'm saying because of the 2 construction of the Amistad Reservoir, which is 3 capturing any of the flows that are coming in 4 upstream, including rainfall, hurricanes, monsoons, 5 which I referenced previously, the Amistad becomes a 6 controlling structure, which changed the flow regime 7 at Eagle Pass so that it is now regulated compared to 8 Figure 9, which shows greater variability. 9 Q. Other than that, are there any other 10 opinions -- other than what you've already talked 11 about -- strike that. 12 Other than what you've already talked 13 about, are there any other opinions that you give in 14 Section 7.2 of your expert report? 15 A. I do not see any, no. 16 Q. Moving to Section 8.0 -- this is 8, but I 17 think it means 8.0 -- on page 28 of your expert 18 report, do you -- is all the information contained in 19 that section factual? 20 MR. HARRISON: Objection. Form. 21 A. Everything except for the first sentence 22 where I say that it is drastically altered. 23 Q. (BY MR. STONE) And is the opi -- is the 24 opinion that you're offering in that sentence your 25 subjective use of the word "drastically"?</p> |

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| <p>190</p> <p>1 A. That is correct.</p> <p>2 Q. Okay. Other than your subjective use of the</p> <p>3 word "drastically" in that sentence, are there any</p> <p>4 other opinions expressed in Sections 8.0 of your</p> <p>5 report?</p> <p>6 A. I do not see any.</p> <p>7 Q. In Section -- let's look at Section 8.1 of</p> <p>8 your report. Does Section 8.1 contain only factual</p> <p>9 information?</p> <p>10 MR. HARRISON: Objection. Form.</p> <p>11 A. I believe that is all factual, yes.</p> <p>12 Q. (BY MR. STONE) Okay. Next let's go to</p> <p>13 Section 8.2. Is all of the information contained in</p> <p>14 Section 8.2 of your report factual?</p> <p>15 MR. HARRISON: Objection. Form.</p> <p>16 A. Only -- it is factual except for usages of,</p> <p>17 like, "greatly" as one of the descriptor words.</p> <p>18 Q. (BY MR. STONE) I knew you were going to say</p> <p>19 that. I read the same thing, and I thought -- all</p> <p>20 right.</p> <p>21 So other than the subjective use of the</p> <p>22 term "greatly," are there any other opinions that you</p> <p>23 are offering in this section?</p> <p>24 A. I do not see any, no.</p> <p>25 Q. Okay. Let's look at Section 8.3 of your</p> | <p>192</p> <p>1 watercraft that we use, so I believe it is just</p> <p>2 factual information that's being conveyed.</p> <p>3 Q. Next I want to ask about Section 9. And</p> <p>4 it's not numbered. It's just one section for 9.</p> <p>5 This is on page 36 of your expert</p> <p>6 report. Looking at Section 9, is this all factual</p> <p>7 information?</p> <p>8 MR. HARRISON: Objection. Form.</p> <p>9 A. I believe I make opinions on how or what</p> <p>10 could be done with the treaty with regards to how it</p> <p>11 is written to support navigational enhancement</p> <p>12 between Amistad and Falcon Dams in the context of the</p> <p>13 treaty itself.</p> <p>14 Q. (BY MR. STONE) So what is the first expert</p> <p>15 opinion that you express in Section 9 of this report?</p> <p>16 A. I make a statement that "It follows then</p> <p>17 that the creation of navigation as a priority use of</p> <p>18 the waters of the Rio Grande is consistent with the</p> <p>19 objectives from the '44 Water Treaty from its</p> <p>20 inception. An amendment or modification to the</p> <p>21 general rules may be required since the stretch of</p> <p>22 the river under review is between Amistad and</p> <p>23 Falcon."</p> <p>24 So I'm -- I'm just stating fact, but I</p> <p>25 am like making a conclusion that...</p> |
| <p>191</p> <p>1 expert report. Is the information contained in 8.3</p> <p>2 of your expert report all factual information?</p> <p>3 MR. HARRISON: Objection. Form.</p> <p>4 A. I believe this is all factual information,</p> <p>5 yes.</p> <p>6 Q. (BY MR. STONE) Looking at Section 8.4, is</p> <p>7 all the information contained in Section 8.4 of your</p> <p>8 expert report factual information?</p> <p>9 MR. HARRISON: Objection. Form.</p> <p>10 A. I believe it is all factual, yes.</p> <p>11 Q. (BY MR. STONE) Okay. Looking at -- so for</p> <p>12 Sections 8.0 through 8.4, other than what you</p> <p>13 specifically flagged, are there any -- were there any</p> <p>14 other expert opinions that you offered in those</p> <p>15 sections?</p> <p>16 A. I do not believe so.</p> <p>17 Q. Okay. Let's look at Section 8.5. Is the</p> <p>18 information contained in Section 8.5 of your report</p> <p>19 only factual information?</p> <p>20 MR. HARRISON: Objection. Form.</p> <p>21 A. I believe it is all factual information.</p> <p>22 Q. (BY MR. STONE) Are you offering any expert</p> <p>23 opinions in this case in Section 8.5 of your report?</p> <p>24 A. As I reread the section and review it, I</p> <p>25 believe it is only providing information on the</p> | <p>193</p> <p>1 Q. When you say that it -- okay. So the 1944</p> <p>2 Water Treaty expressly lists navigation as one of the</p> <p>3 priority uses, right?</p> <p>4 A. Yes.</p> <p>5 Q. So what do you mean that "It then follows</p> <p>6 that creation of navigation as a priority use of the</p> <p>7 water is consistent with the 1944 Water Treaty"?</p> <p>8 A. So if a proponent -- I'm not going to say</p> <p>9 who or what -- said that they were going to use</p> <p>10 waters that was allocated to them -- let's say in</p> <p>11 Mexico --</p> <p>12 Q. Uh-huh.</p> <p>13 A. -- for the purposes of navigation, Article 3</p> <p>14 of the treaty allows that as identified purpose</p> <p>15 for -- of use of that water.</p> <p>16 Q. Well, I mean, it says that in Article 3,</p> <p>17 right?</p> <p>18 A. Yes.</p> <p>19 Q. So that's just a fact, right? That's not</p> <p>20 like an opinion?</p> <p>21 A. That's correct, yes.</p> <p>22 Q. Okay. Is there anything else in that first</p> <p>23 paragraph that -- is there anything in that paragraph</p> <p>24 on page 36 of Cortez Exhibit 2 that is opinion?</p> <p>25 A. In just that paragraph, I don't see</p> |

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| <p>194</p> <p>1 anything, no.</p> <p>2 Q. It's all factual information in that</p> <p>3 paragraph, right?</p> <p>4 A. I believe so.</p> <p>5 Q. Okay. So let's look at the next paragraph,</p> <p>6 paragraph 2 under Section 9. Is the information in</p> <p>7 this paragraph all factual?</p> <p>8 MR. HARRISON: Objection. Form.</p> <p>9 A. I do make a conjecture that "If releases for</p> <p>10 the purposes of navigation require operations</p> <p>11 inconsistent with the general rules currently</p> <p>12 outlined in the treaty, then an amendment or</p> <p>13 modification to that provision may be required at</p> <p>14 the -- subject to the approval of the two</p> <p>15 governments."</p> <p>16 Q. (BY MR. STONE) So to the extent that any</p> <p>17 kind of navigational use conflicted with the current</p> <p>18 prioritization storage to fulfill flood control,</p> <p>19 irrigation use, and power requirements, it might</p> <p>20 require amendment or modification. Is that fair?</p> <p>21 A. That seems to be a summary of what I put in</p> <p>22 there.</p> <p>23 Q. So you said, "would be possible," right?</p> <p>24 A. Yes, I say, "would be possible."</p> <p>25 Q. But would an amendment or a modification to</p> | <p>196</p> <p>1 Q. (BY MR. STONE) Wait. In the treaty, or in</p> <p>2 the Amistad Dam rules?</p> <p>3 A. So the treaty has specific general rules,</p> <p>4 and they identify the uppermost reservoir, which,</p> <p>5 once it was constructed, was Amistad.</p> <p>6 Q. So in other words, while navigation is</p> <p>7 listed as a priority in Article 2 of the 1944 Water</p> <p>8 Treaty, the treaty goes on to list the actual</p> <p>9 priorities for the Amistad Dam, and navigation is not</p> <p>10 one of them, right?</p> <p>11 A. That's correct for Article 3.</p> <p>12 Q. And that's why you would need to actually</p> <p>13 amend or modify Article 3 to add navigation to be a</p> <p>14 priority for the Amistad Dam, right?</p> <p>15 A. Only in the sense that in the next paragraph</p> <p>16 I do note that if navigation was needed and it also</p> <p>17 coincided with the flood control, irrigation, and</p> <p>18 power requirements, then there would be no</p> <p>19 modification required.</p> <p>20 Q. Describe how such a release would be</p> <p>21 possible.</p> <p>22 MR. HARRISON: Objection. Form.</p> <p>23 A. If I'm just hypothetically talking about --</p> <p>24 Q. (BY MR. STONE) Uh-huh.</p> <p>25 A. -- right. So if you're operating a kayaking</p> |
| <p>195</p> <p>1 the provision be plausible?</p> <p>2 MR. HARRISON: Objection. Form.</p> <p>3 A. I would not be able to speak to whether or</p> <p>4 not it's plausible.</p> <p>5 Q. (BY MR. STONE) Has it ever happened before</p> <p>6 where there was such an amendment or modification to</p> <p>7 the treaty?</p> <p>8 MR. HARRISON: Objection. Form.</p> <p>9 A. Not to my knowledge.</p> <p>10 Q. (BY MR. STONE) Do you have any reason to</p> <p>11 believe that the two governments would agree to such</p> <p>12 a modification?</p> <p>13 MR. HARRISON: Objection. Form.</p> <p>14 A. I could not project, you know, decades from</p> <p>15 now what's -- what would happen.</p> <p>16 Q. (BY MR. STONE) I mean, assuming there's</p> <p>17 still water in the Amistad Reservoir, right?</p> <p>18 MR. HARRISON: Objection. Form.</p> <p>19 A. That would be a consideration in the</p> <p>20 agreements.</p> <p>21 Q. (BY MR. STONE) So the current rules of</p> <p>22 Amistad do not prioritize navigation at all, do they?</p> <p>23 MR. HARRISON: Objection. Form.</p> <p>24 A. It is not one of the listed topics in the</p> <p>25 treaty as quoted there.</p> | <p>197</p> <p>1 business or a canoe trip business or something like</p> <p>2 that, there's always going to be releases out of the</p> <p>3 dam year-round made, and additionally -- sorry. Let</p> <p>4 me rephrase that.</p> <p>5 Additionally, as I've said previously,</p> <p>6 there are periods where either country are moving</p> <p>7 water down, so they -- in order to do that as</p> <p>8 efficiently as possible, they will try and release a</p> <p>9 large volume at a high rate. So in the sense that if</p> <p>10 any of those uses for navigation are compliant and</p> <p>11 merge well with the current operations, then</p> <p>12 Article 2 identifies that you could -- navigation is</p> <p>13 certainly a -- navigation is a use of the waters of</p> <p>14 the river.</p> <p>15 Q. In other words, the -- if navigation was</p> <p>16 incidental to one of the other releases, priority</p> <p>17 releases, then it wouldn't -- you wouldn't need to do</p> <p>18 any modification?</p> <p>19 A. That sounds accurate as you've stated.</p> <p>20 Q. Okay. You say here that "if Falcon has</p> <p>21 sufficient storage to capture water releases from</p> <p>22 Amistad Dam," right?</p> <p>23 A. Yes, I say that.</p> <p>24 Q. Right. Sorry. Final sentence of the third</p> <p>25 paragraph under Section 9. Do you see that?</p> |

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| <p style="text-align: right;">198</p> <p>1 A. Yes. I read that, yes.</p> <p>2 Q. Okay. What is the -- you say, "if Falcon</p> <p>3 has sufficient storage to capture water released from</p> <p>4 Amistad Dam." What do you mean by that?</p> <p>5 A. What I mean by that is that if, for</p> <p>6 instance, Falcon was as full and you were releasing</p> <p>7 water out of Amistad Dam for navigation and it</p> <p>8 wouldn't also comply with the flood control,</p> <p>9 irrigation use, and power requirements downstream.</p> <p>10 So the simple answer would be you don't</p> <p>11 want to waste water to the gulf that's not being</p> <p>12 used. And due to the physical limitations of the</p> <p>13 dam, if it's full and you release a larger water --</p> <p>14 volume of water to it, you essentially would be</p> <p>15 wasting water downstream.</p> <p>16 Q. When you say here, "Operations can be</p> <p>17 planned to allow seasonal navigation of this stretch</p> <p>18 of the river," what stretch are you talking about?</p> <p>19 A. In this instance I was talking about the</p> <p>20 region near Eagle Pass or between Amistad and Falcon,</p> <p>21 as we've been discussing, but without getting into</p> <p>22 the details of depths and exact rates.</p> <p>23 Q. Okay. So this stretch -- you're not talking</p> <p>24 about the Falcon Reservoir here?</p> <p>25 A. I am not speaking to Falcon Reservoir, no.</p> | <p style="text-align: right;">200</p> <p>1 Commission has boats on the Rio Grande River, that's</p> <p>2 not navigation for the purposes of the 1944 Water</p> <p>3 Treaty, right?</p> <p>4 A. I guess --</p> <p>5 MR. HARRISON: Objection. Form.</p> <p>6 THE WITNESS: Sorry.</p> <p>7 A. You have to -- one, you would have -- a</p> <p>8 water right implies that there is a use of the water.</p> <p>9 Q. (BY MR. STONE) Uh-huh.</p> <p>10 A. Right? So if I'm just floating on the</p> <p>11 river, you would have to identify what the use of</p> <p>12 that water is, if there is a loss of the water -- in</p> <p>13 terms of water rights as it is explained right now.</p> <p>14 So we're not diverting water out of the river to put</p> <p>15 a boat on the river; it's just an -- the water is</p> <p>16 there.</p> <p>17 So under the current regime, it's</p> <p>18 incidental/apportioned for us to navigate, but I</p> <p>19 don't see how it relates specifically to water rights</p> <p>20 in that instance.</p> <p>21 Q. You, again, in this final sentence, "If</p> <p>22 Falcon has sufficient storage to capture water</p> <p>23 releases -- water released from Amistad Dam and this</p> <p>24 water is required for beneficial use by downstream</p> <p>25 users, operations could be planned to allow seasonal</p> |
| <p style="text-align: right;">199</p> <p>1 Q. You're talking about the whole, you know,</p> <p>2 river mile 275.5 to 610?</p> <p>3 A. In that stretch, yes.</p> <p>4 Q. Okay. Even if that -- a minute ago you were</p> <p>5 talking about how navigational use could be</p> <p>6 incidental to other priority usages, but even an</p> <p>7 incidental use of water for navigation would still</p> <p>8 require a water right, right?</p> <p>9 MR. HARRISON: Objection. Form.</p> <p>10 A. In the sense that an incidental use of the</p> <p>11 water, right. So the example would be the</p> <p>12 Commission, in order to do its mission, puts boats on</p> <p>13 the river every day. To my knowledge, we don't have</p> <p>14 a water right specifically for putting boats on the</p> <p>15 river and conducting our mission. It is an</p> <p>16 incidental of the water just being in the river.</p> <p>17 Q. (BY MR. STONE) Power generation, as an</p> <p>18 incidental use, has a TCEQ-issued water right, right?</p> <p>19 A. That is my understanding, yes.</p> <p>20 Q. But you're saying that IBWC boats on the</p> <p>21 water on the Rio Grande River do not require a water</p> <p>22 right for navigation?</p> <p>23 A. I am not aware of a navigation water right</p> <p>24 to put -- for the Commission to do its mission.</p> <p>25 Q. That's because when the IBW -- when the</p> | <p style="text-align: right;">201</p> <p>1 navigation of this stretch of the river," right?</p> <p>2 A. Yes, that is what I write.</p> <p>3 Q. But isn't it true that commercial navigation</p> <p>4 does not operate on a seasonal basis?</p> <p>5 A. I couldn't speak to all the uses for</p> <p>6 commercial navigation.</p> <p>7 Q. You said that the boats, IB -- the</p> <p>8 Commission's boats on the Rio Grande River don't</p> <p>9 require a permit, because there's not a water</p> <p>10 diversion for them to operate. But you're not</p> <p>11 diverting water out of the river for power generation</p> <p>12 at the Amistad Dam, are you?</p> <p>13 A. There are conveyance losses associated with</p> <p>14 that, and those conveyance losses for power</p> <p>15 generating would be charged to the country making</p> <p>16 that diversion.</p> <p>17 Q. I want to parse this sentence here: "This</p> <p>18 water is required for beneficial use by downstream</p> <p>19 users." What do you mean by that phrase in the</p> <p>20 sentence?</p> <p>21 A. Okay. So under typical operations we are</p> <p>22 moving -- the Amistad is like our piggy bank. It is</p> <p>23 where we keep the water. And we move it down to</p> <p>24 Falcon for release to the users in that region.</p> <p>25 So what I'm referring to there is just,</p> |

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| <p style="text-align: right;">202</p> <p>1 with the way that Amistad is currently operated, we 2 make releases to move the water to Falcon. Not -- 3 also there are consumptive uses between those two 4 points as well that will play into that. 5 Q. Other than what we've talked about, are 6 there any other expert opinions that you express in 7 Section 9 of your report? 8 A. I don't believe so. 9 Q. So going to Section 10, which is literally 10 entitled in part, "State of Expert Opinion." I want 11 to go through the expert opinions that you -- let me 12 start with are you expressing expert opinions in this 13 section? 14 A. I believe I am -- 15 Q. Okay. 16 A. -- stating... 17 Q. So let's start with each -- let's go through 18 each of the opinions that you express in Section 10 19 of your report. 20 What is the first expert opinion that 21 you provide here? 22 A. Give me a second to read through this. 23 Q. Uh-huh. 24 A. I believe my first opinion relates to the 25 first sentence of the -- I guess -- is this the first</p> | <p style="text-align: right;">204</p> <p>1 priorities of the current water allocations and 2 management practices change, the treaty was written 3 with the required flexibility to accommodate these 4 adjustments." 5 Q. I'm sorry, I didn't see -- oh, okay. So the 6 last sentence of the final paragraph on -- in 7 Section 10, is that what you just read? 8 A. That is correct, yes. 9 Q. And I'm sorry because I wasn't listening. 10 Could you read it one more time? 11 A. "If priorities of the current water 12 allocations and management practices change, the 13 treaty was written with the required flexibility to 14 accommodate these adjustments." 15 Q. And that's an opinion, not a fact. 16 A. That is an opinion on my reading of the 17 treaty. 18 Q. I see. 19 A. Yep. 20 Q. Okay. Other than the "highly modified," the 21 "greatly modified," and the final sentence about 22 priorities changing, are there any other expert 23 opinions that you offer in Section 10 of your report? 24 A. The last sentence -- let me read it -- for 25 the second paragraph on that page, "The use of water</p> |
| <p style="text-align: right;">203</p> <p>1 paragraph? 2 MR. HARRISON: Second -- 3 Q. (BY MR. STONE) I believe there is an 4 earlier paragraph on Page 36. 5 A. So the second paragraph where I state that 6 "The flow regime of the Rio Grande has been highly 7 modified over time," and then I -- 8 Q. Before you go on, is -- just to clarify 9 here, is the expert opinion that you're expressing in 10 that sentence the subjective use of the word 11 "highly"? 12 A. Or "highly modified" together. 13 Q. Okay. What's the next opinion? 14 A. In the second -- or the second paragraph on 15 that page, I do state, "The construction of Amistad 16 Dam and other small infrastructure, like Maverick 17 Dam, have greatly modified the flow regime downstream 18 of Del Rio, Texas, to Falcon Dam and Reservoir." 19 Q. Okay. Oh, I see here. And is the opinion 20 that you're expressing in that sentence the 21 subjective use of the word "greatly modified"? 22 A. Yes. 23 Q. Okay. What is the next expert opinion that 24 you provide in Section 10? 25 A. The last sentence of the section where, "If</p> | <p style="text-align: right;">205</p> <p>1 for the purpose of navigation in this reach between 2 the two dams is highly dependent on the consumptive 3 use needs of water users in the U.S. and Mexico." I 4 believe that's a statement of fact. 5 Q. That's a statement of fact, okay. 6 A. Yes. 7 Q. Okay. All right. 8 MR. STONE: Why don't we take a break. 9 I think we've gone through most of the expert report, 10 so why don't we take a -- let's go off the record. 11 THE VIDEOGRAPHER: The time is 3:25 p.m. 12 We're off the record. 13 (Recess 3:25 p.m. to 3:44 p.m.) 14 THE VIDEOGRAPHER: The time is 3:44 p.m. 15 We're back on the record. 16 Q. (BY MR. STONE) Are all waters of the Rio 17 Grande River in Texas fully appropriated? 18 A. Yes, that is an accurate statement, to my 19 knowledge. 20 Q. Does the IBWC perform any channel 21 maintenance between Amistad and Falcon Dams? 22 A. We would be performing channel maintenance 23 with regards to like vegetation clearing and those 24 things as part of our jurisdictional duties. 25 Q. Do you do that along the entire stretch or</p> |

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| <p>206</p> <p>1 just where the gages are?</p> <p>2 A. It's going to be a site-by-site-dependent</p> <p>3 decision. It may not just be the gages. There may</p> <p>4 be other considerations, and there may be others who</p> <p>5 are doing that. For instance, border patrol may have</p> <p>6 a reason to clear sections of the river of</p> <p>7 vegetation.</p> <p>8 Q. Next I am sharing in the chat what we're</p> <p>9 marking as Cortez 6.</p> <p>10 (Cortez Exhibit 6 marked.)</p> <p>11 Q. (BY MR. STONE) And I'll -- do you recognize</p> <p>12 this document?</p> <p>13 A. I don't believe I've seen that -- this</p> <p>14 document before.</p> <p>15 Q. This is the 1975 study that has been talked</p> <p>16 a lot about in this case.</p> <p>17 Are you familiar with it at all?</p> <p>18 A. I have not reviewed it, no.</p> <p>19 Q. Okay. Do you work for the International</p> <p>20 Boundary and Water Commission?</p> <p>21 A. Yes, I work for the International Boundary</p> <p>22 and Water Commission, U.S. Section.</p> <p>23 Q. Was an entity formerly known or referred to</p> <p>24 as the -- strike that.</p> <p>25 Was that entity formerly known or</p> | <p>208</p> <p>1 A. I have not seen that document that you</p> <p>2 described.</p> <p>3 Q. (BY MR. STONE) Let me show you -- well, I</p> <p>4 am showing you what is Cortez Exhibit 6, which is a</p> <p>5 copy of that study.</p> <p>6 Let's look at Exhibit 23 to this study.</p> <p>7 And just because it's so slow with the uptick, I'm</p> <p>8 going to go to Exhibit 23 and share screen again.</p> <p>9 Apologies for the delay. I'm coming.</p> <p>10 In the section of the 1975 navigability</p> <p>11 study, there is a statement that both river flows</p> <p>12 through regions of -- strike that.</p> <p>13 In the study, the 1975 navigability</p> <p>14 study, there is a statement relating to the Rio</p> <p>15 Grande River and Colorado Rivers that, quote, both</p> <p>16 rivers flow through regions of scanty and uncertain</p> <p>17 rainfall, unquote. Is that an accurate statement?</p> <p>18 MR. HARRISON: Objection. Form.</p> <p>19 A. Scan -- use the words again. Scanty and --</p> <p>20 Q. (BY MR. STONE) Scanty and uncertain</p> <p>21 rainfall.</p> <p>22 A. Okay. And if -- are you asking me if it's</p> <p>23 accurate, what's written in the report?</p> <p>24 Q. No.</p> <p>25 A. Because I haven't ever seen the report --</p> |
| <p>207</p> <p>1 referred to as the International Water Commission?</p> <p>2 A. My understanding of that is that the</p> <p>3 International -- the duties of the International</p> <p>4 Water Commission were granted to the IBWC, the</p> <p>5 International Boundary Commission, which later became</p> <p>6 the International Boundary and Water Commission.</p> <p>7 Q. So it was called the International -- hold</p> <p>8 on, sorry.</p> <p>9 So it was called the International</p> <p>10 Boundary Commission?</p> <p>11 A. Your original question is whether or not the</p> <p>12 International Water Commission became the</p> <p>13 International Boundary Commission, I believe -- or I</p> <p>14 was saying that the duties of the International Water</p> <p>15 Commission were transferred to the International</p> <p>16 Boundary Commission, and the Water Commission was</p> <p>17 sunset.</p> <p>18 Q. I see. Okay. Thank you for the</p> <p>19 clarification.</p> <p>20 Have you -- I asked a minute ago, but</p> <p>21 have you seen -- have you ever seen the March 1975</p> <p>22 navigability study by the United States Army Corps of</p> <p>23 Engineers regarding the Rio Grande River Basin from</p> <p>24 river miles 275.5 to 610?</p> <p>25 MR. HARRISON: Objection. Form.</p> | <p>209</p> <p>1 Q. No, I'm not asking --</p> <p>2 A. -- so I can't say --</p> <p>3 Q. I'm asking if the statement is accurate.</p> <p>4 So, in other words -- let me phrase it</p> <p>5 differently. In the -- is the Rio Grande River,</p> <p>6 river miles 275.5 to 610 -- is that, as the river</p> <p>7 flows through that region, subject to scanty and</p> <p>8 uncertain rainfall?</p> <p>9 MR. HARRISON: Objection. Form.</p> <p>10 A. Specifically, you said, rainfall? It is</p> <p>11 subject to scanty and uncertain rainfall just as</p> <p>12 rainfall in general can be variable.</p> <p>13 Q. (BY MR. STONE) So is it your testimony that</p> <p>14 every river in the United States is subject to scanty</p> <p>15 and uncertain rainfall?</p> <p>16 MR. HARRISON: Objection. Form.</p> <p>17 A. From my understanding of hydrology and my</p> <p>18 experience, you know, there is going to be a range of</p> <p>19 rainfall that's going to be variable over time. You</p> <p>20 know, it's not raining every single day on every</p> <p>21 single place, and the ability to predict rainfall is</p> <p>22 a -- you know, that's a science in and of itself. So</p> <p>23 variable rainfall would be -- yes.</p> <p>24 Q. (BY MR. STONE) So variable rainfall could</p> <p>25 range from no rainfall at all to monsoon-like</p> |

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| <p style="text-align: right;">210</p> <p>1 conditions. Is that fair?</p> <p>2 A. Yes.</p> <p>3 Q. How many times have there been monsoon-like</p> <p>4 conditions on this stretch of the Rio Grande River</p> <p>5 we're talking about right now?</p> <p>6 A. Over what period?</p> <p>7 Q. Since 19 -- prior to 1975.</p> <p>8 A. I could not give an accurate number on how</p> <p>9 many times it's rained in that basin due to its size.</p> <p>10 Q. Do you agree with the statement that "There</p> <p>11 has never been any practical navigation of the 1,014</p> <p>12 miles of river between El Paso and Roma"?</p> <p>13 MR. HARRISON: Objection. Form.</p> <p>14 A. I don't know the source or information or</p> <p>15 standing of that statement, so I couldn't be able to</p> <p>16 give an opinion on it.</p> <p>17 Q. (BY MR. STONE) Do you know whether IBWC has</p> <p>18 ever advised Congress of anything regarding</p> <p>19 historical navigation of the Rio Grande River</p> <p>20 inconsistent with the statement that there's never</p> <p>21 been any practical navigation on the 1,014-mile</p> <p>22 stretch between Roma and El Paso?</p> <p>23 MR. HARRISON: Objection. Form.</p> <p>24 A. I couldn't provide an answer to that.</p> <p>25 Q. (BY MR. STONE) Are you aware of anyone</p> | <p style="text-align: right;">212</p> <p>1 Grande and Colorado Rivers have so completely changed</p> <p>2 that the spirit is dead, if not the letter, of those</p> <p>3 parts of the treaties that deal with navigation"?</p> <p>4 MR. HARRISON: Objection. Form.</p> <p>5 A. Again, I wouldn't be able to give an opinion</p> <p>6 on that statement.</p> <p>7 Q. (BY MR. STONE) Why can't you give an</p> <p>8 opinion on that statement?</p> <p>9 A. I don't know who said it or where it was</p> <p>10 written or what the basis for that -- you know, if</p> <p>11 someone says the sky is red, my first question is</p> <p>12 going to be "Why do you say that?"</p> <p>13 Q. Would it change your opinion if that</p> <p>14 statement was made by the IBWC?</p> <p>15 MR. HARRISON: Objection. Form.</p> <p>16 A. Again, without -- you're providing me</p> <p>17 information that I haven't seen before or even</p> <p>18 knowledge that it was presented by IBWC, so I</p> <p>19 couldn't provide a position that just because it was</p> <p>20 said by somebody, that that somehow changes my</p> <p>21 opinion of the -- any statement.</p> <p>22 Q. (BY MR. STONE) Do you agree with the</p> <p>23 statement that "Above Laredo up to Eagle Pass,</p> <p>24 navigation is impeded by rocks and ledges at low</p> <p>25 water levels"?</p> |
| <p style="text-align: right;">211</p> <p>1 associated with the IBWC who would disagree with that</p> <p>2 statement today?</p> <p>3 MR. HARRISON: Objection. Form.</p> <p>4 A. Again, I couldn't project the decisions of</p> <p>5 others or the statements of others.</p> <p>6 Q. (BY MR. STONE) Are you aware of anyone</p> <p>7 associated with the IBWC who has ever said anything</p> <p>8 inconsistent with that statement that there has been</p> <p>9 no practical navigation on the stretch between</p> <p>10 El Paso and Roma?</p> <p>11 MR. HARRISON: Objection. Form.</p> <p>12 A. I guess, having not known the source of that</p> <p>13 statement or why it would come up or where it would</p> <p>14 come up, I don't have any knowledge of that.</p> <p>15 Q. (BY MR. STONE) Are you aware of any</p> <p>16 practical navigation on the Rio Grande River between</p> <p>17 El Paso and Roma?</p> <p>18 MR. HARRISON: Objection. Form.</p> <p>19 A. Without knowing a definition of "practical</p> <p>20 navigation," I wouldn't be able to give an answer to</p> <p>21 that statement.</p> <p>22 Q. (BY MR. STONE) Would you agree with the</p> <p>23 statement that "It is therefore apparent that the</p> <p>24 conditions which form the basis of the agreement in</p> <p>25 the old treaties concerning navigation of the Rio</p> | <p style="text-align: right;">213</p> <p>1 MR. HARRISON: Objection. Form.</p> <p>2 A. Again, it would depend on -- I would verify</p> <p>3 any sort of statement if I was going to say I agree</p> <p>4 with it.</p> <p>5 Q. (BY MR. STONE) Okay. So let's get out of</p> <p>6 the context of --</p> <p>7 Let's forget about the 1975 report,</p> <p>8 okay? Let's set that aside. I'm just going to ask</p> <p>9 you for your opinions about the Rio Grande River</p> <p>10 right now.</p> <p>11 Above Laredo up to Eagle Pass, is</p> <p>12 navigation on the Rio Grande River impeded by rocks</p> <p>13 and ledges at low water levels?</p> <p>14 A. As a general statement, any river would be</p> <p>15 impeded by those items you identify at low water</p> <p>16 levels. So, yes.</p> <p>17 Q. Do you agree that with the advent of</p> <p>18 railroads in 1882, it led to the decline and eventual</p> <p>19 extinction of commercial navigation on the Rio Grande</p> <p>20 River?</p> <p>21 MR. HARRISON: Objection. Form.</p> <p>22 A. I couldn't give an opinion on that</p> <p>23 statement.</p> <p>24 Q. (BY MR. STONE) What is your best estimate</p> <p>25 of when commercial navigation on the Rio Grande River</p> |

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| <p style="text-align: right;">214</p> <p>1 became extinct?</p> <p>2 MR. HARRISON: Objection. Form.</p> <p>3 A. I couldn't provide any estimate.</p> <p>4 Q. (BY MR. STONE) What dredging, if any, has</p> <p>5 been done in the Rio Grande River between Amistad Dam</p> <p>6 and the city of Laredo?</p> <p>7 MR. HARRISON: Objection. Form.</p> <p>8 A. I can't speak to any specific instance.</p> <p>9 Q. (BY MR. STONE) So you're not aware of any</p> <p>10 dredging that's taken place in that stretch?</p> <p>11 MR. HARRISON: Objection. Form.</p> <p>12 A. In my job duties, I'm not aware of any --</p> <p>13 anything of that nature in that stretch.</p> <p>14 Q. (BY MR. STONE) Are there any current</p> <p>15 proposals before IBWC for dredging in the Rio Grande</p> <p>16 between Lake Amistad and the city of Laredo?</p> <p>17 MR. HARRISON: Objection. Form.</p> <p>18 A. Proposals that have gone to the IBWC? I'm</p> <p>19 not aware of anything.</p> <p>20 Q. (BY MR. STONE) When is the last time there</p> <p>21 was such a proposal?</p> <p>22 MR. HARRISON: Objection. Form.</p> <p>23 A. I couldn't speak to that.</p> <p>24 Q. (BY MR. STONE) What environmental data</p> <p>25 studies and review would be required by IBWC before</p> | <p style="text-align: right;">216</p> <p>1 Rio Grande in that area?</p> <p>2 MR. HARRISON: Objection. Form.</p> <p>3 A. Could we go back one? If you could define</p> <p>4 what you consider a hydrological study from your</p> <p>5 cite.</p> <p>6 Q. (BY MR. STONE) Okay. So strike the last</p> <p>7 question, and let's step back.</p> <p>8 A. Yes --</p> <p>9 Q. Let's go back to the prior question.</p> <p>10 So let me ask it again. And listen</p> <p>11 carefully, and if you need clarification, we'll get</p> <p>12 that.</p> <p>13 What hydrological data, studies, and</p> <p>14 review would be required by IBWC before it would</p> <p>15 approve a proposal to approve dredging in the Rio</p> <p>16 Grande River between Amistad Dam and Laredo?</p> <p>17 MR. HARRISON: Objection. Form.</p> <p>18 A. I can't think of specific requirements they</p> <p>19 would have beyond compliance with the treaties for</p> <p>20 the boundary and such.</p> <p>21 Q. (BY MR. STONE) If there were a proposal to</p> <p>22 the IBWC to approve dredging or other improvements to</p> <p>23 the Rio Grande River between Amistad Dam and the city</p> <p>24 of Laredo to facilitate commercial navigation, would</p> <p>25 IBWC require data or studies showing that there is</p> |
| <p style="text-align: right;">215</p> <p>1 it would approve a proposal to approve dredging in</p> <p>2 the Rio Grande River between Amistad Dam and Laredo?</p> <p>3 MR. HARRISON: Objection. Form.</p> <p>4 A. So any sort of work along the river, you</p> <p>5 would be conducting some sort of analysis,</p> <p>6 environmental review if it's in the United States or</p> <p>7 Mexico, complying with their side and the</p> <p>8 requirements. So if hydraulic analysis is necessary,</p> <p>9 it just depends on specifically what you're doing, if</p> <p>10 it was an engineering project or something.</p> <p>11 Q. (BY MR. STONE) What hydrological data,</p> <p>12 studies, and review would be required by IBWC before</p> <p>13 it would approve a proposal to approve dredging in</p> <p>14 the Rio Grande River between Amistad Dam and Laredo?</p> <p>15 MR. HARRISON: Objection. Form.</p> <p>16 A. Hydrological studies? I'm not aware of</p> <p>17 anything at this moment.</p> <p>18 Q. (BY MR. STONE) If there was a proposal --</p> <p>19 strike that.</p> <p>20 If there were a proposal to the IBWC to</p> <p>21 approve dredging or other improvements to the Rio</p> <p>22 Grande between Amistad Dam and the city of Laredo to</p> <p>23 facilitate commercial navigation, would IBWC require</p> <p>24 data or studies showing that there is actually</p> <p>25 substantial demand for commercial navigation in the</p> | <p style="text-align: right;">217</p> <p>1 actually substantial demand for commercial navigation</p> <p>2 in the Rio Grande in that area?</p> <p>3 MR. HARRISON: Objection. Form.</p> <p>4 A. I cannot speculate on something outside of</p> <p>5 my job duties. As it relates to the permitting and</p> <p>6 stuff like that, to do that, I've -- it's...</p> <p>7 Q. (BY MR. STONE) So are you aware of the IBWC</p> <p>8 permitting process to approve dredging?</p> <p>9 A. I am not.</p> <p>10 Q. Okay. I'm -- let me close the loop there.</p> <p>11 Are you an expert on the permit approval</p> <p>12 process for dredging in the Rio Grande River?</p> <p>13 A. I am not.</p> <p>14 Q. To your knowledge, is there actually any</p> <p>15 current substantial demand for commercial navigation</p> <p>16 in the Rio Grande between Amistad Dam and the city of</p> <p>17 Laredo?</p> <p>18 MR. HARRISON: Objection. Form.</p> <p>19 A. Specifically speaking to my knowledge, I am</p> <p>20 not aware.</p> <p>21 Q. (BY MR. STONE) Would you -- would you agree</p> <p>22 that the possibility of any future demand for</p> <p>23 commercial navigation between Amistad Dam and the</p> <p>24 city of Laredo is speculative?</p> <p>25 MR. HARRISON: Objection. Form.</p> |

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| <p style="text-align: right;">218</p> <p>1 A. I couldn't give an opinion on that -- yeah.</p> <p>2 Q. (BY MR. STONE) What future demand for</p> <p>3 commercial navigation in the area between Amistad Dam</p> <p>4 and the city of Laredo is reasonably likely to occur?</p> <p>5 MR. HARRISON: Objection. Form.</p> <p>6 A. Again, I can't speculate on the future.</p> <p>7 Q. (BY MR. STONE) Is it correct that there are</p> <p>8 no locks at Amistad or Falcon Dam that would allow</p> <p>9 vessels engaged in commercial navigation to pass</p> <p>10 through or around either of those dams?</p> <p>11 MR. HARRISON: Objection. Form.</p> <p>12 A. Not to my knowledge.</p> <p>13 Q. (BY MR. STONE) Would any future commercial</p> <p>14 navigation on the Rio Grande from Eagle Pass to any</p> <p>15 point below Falcon Dam require the creation of locks</p> <p>16 or another practical means of going through or around</p> <p>17 Falcon Dam?</p> <p>18 MR. HARRISON: Objection. Form.</p> <p>19 A. I'm treating this simply as a hypothetical</p> <p>20 question to me. Yes, it would -- likely would be</p> <p>21 required locks to do what you said.</p> <p>22 Q. (BY MR. STONE) Would you agree that</p> <p>23 creation of any locks at Amistad or Falcon Dam to</p> <p>24 facilitate commercial navigation would be</p> <p>25 prohibitively expensive?</p> | <p style="text-align: right;">220</p> <p>1 A. Sorry, could you restate the question?</p> <p>2 Q. (BY MR. STONE) Uh-huh. To conduct</p> <p>3 commercial navigation on the Rio Grande River</p> <p>4 anywhere between Amistad Dam and the city of Laredo,</p> <p>5 would it be necessary for the navi -- for the</p> <p>6 commercial navigation operators to have water rights?</p> <p>7 MR. HARRISON: Same objection.</p> <p>8 A. I couldn't speak to that.</p> <p>9 Q. (BY MR. STONE) To conduct commercial</p> <p>10 navigation on the Rio Grande anywhere between Amistad</p> <p>11 Dam and the city of Laredo, would it be necessary for</p> <p>12 the commercial navigation operators to obtain IBWC</p> <p>13 approval?</p> <p>14 MR. HARRISON: Objection. Form.</p> <p>15 A. I couldn't speak to that.</p> <p>16 Q. (BY MR. STONE) Does any person or entity</p> <p>17 currently have IBWC approval or permits to conduct</p> <p>18 any commercial navigation operations on the Rio</p> <p>19 Grande anywhere between Amistad Dam and the city of</p> <p>20 Laredo?</p> <p>21 MR. HARRISON: Objection. Form.</p> <p>22 A. I can't speak to that.</p> <p>23 Q. (BY MR. STONE) Does any person or entity</p> <p>24 currently have a pending application for IBWC</p> <p>25 approval or permits to conduct any commercial</p> |
| <p style="text-align: right;">219</p> <p>1 MR. HARRISON: Objection. Form.</p> <p>2 A. I have no -- I can't give anything as it</p> <p>3 relates to costs to do those sort of things.</p> <p>4 Q. (BY MR. STONE) Has there ever, to your</p> <p>5 knowledge, been a proposal or even discussion</p> <p>6 regarding creating locks or other means of enabling</p> <p>7 vessels to go through or around Amistad or Falcon</p> <p>8 Dams?</p> <p>9 MR. HARRISON: Objection. Form.</p> <p>10 A. Not to my specific knowledge.</p> <p>11 Q. (BY MR. STONE) Is it -- is it correct that</p> <p>12 there are no existing water rights for navigation in</p> <p>13 the Rio Grande anywhere between Amistad Dam and the</p> <p>14 city of Laredo?</p> <p>15 A. Not to my knowledge.</p> <p>16 Q. Is that also true for the entire Rio Grande</p> <p>17 River from El Paso to Brownsville?</p> <p>18 MR. HARRISON: Objection. Form.</p> <p>19 A. Not to my knowledge.</p> <p>20 Q. (BY MR. STONE) To conduct commercial</p> <p>21 navigation on the Rio Grande anywhere between the</p> <p>22 Amistad Dam and the city of Laredo, would it be</p> <p>23 necessary for commercial navigation operators to have</p> <p>24 water rights?</p> <p>25 MR. HARRISON: Objection. Form.</p> | <p style="text-align: right;">221</p> <p>1 navigation operations on the Rio Grande River between</p> <p>2 Amistad Dam and the city of Laredo?</p> <p>3 MR. HARRISON: Objection. Form.</p> <p>4 A. I can't speak to that topic.</p> <p>5 Q. (BY MR. STONE) When is the last time, to</p> <p>6 your knowledge, that any person or entity applied for</p> <p>7 IBWC approval or permits to conduct any commercial</p> <p>8 navigation operations on the Rio Grande anywhere</p> <p>9 between Amistad Dam and the city of Laredo?</p> <p>10 MR. HARRISON: Objection. Form.</p> <p>11 A. Specifically, to my knowledge, I am not</p> <p>12 knowledgeable of that.</p> <p>13 Q. (BY MR. STONE) Earlier you said the</p> <p>14 potential use of the Rio Grande River for commercial</p> <p>15 use was hypothetical, right?</p> <p>16 A. Earlier when?</p> <p>17 Q. A few minutes ago. Do you remem -- do</p> <p>18 you -- let's step back. Let me just ask the</p> <p>19 question.</p> <p>20 Is the potential use of the Rio Grande</p> <p>21 River for commercial navigation hypothetical?</p> <p>22 MR. HARRISON: Objection. Form.</p> <p>23 A. I couldn't speak to that.</p> <p>24 Q. (BY MR. STONE) When -- to your knowledge,</p> <p>25 are there any -- to your knowledge, is there any</p> |

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| <p>222</p> <p>1 present or ongoing commercial navigation on the Rio 2 Grande anywhere between Amistad Dam and the city of 3 Laredo?</p> <p>4 MR. HARRISON: Objection. Form.</p> <p>5 A. Specifically to my knowledge, no.</p> <p>6 Q. (BY MR. STONE) Given the current and recent 7 level of Mexican cartel activity and illegal activity 8 on or near the Rio Grande, would you personally 9 consider it reasonably safe to conduct any commercial 10 navigation operations on the Rio Grande anywhere 11 between the Amistad Dam and the city of Laredo?</p> <p>12 MR. HARRISON: Objection. Form.</p> <p>13 A. I wouldn't be able to give a personal 14 opinion on that subject.</p> <p>15 Q. (BY MR. STONE) Why not?</p> <p>16 A. Simply as it relates to my testimony, this 17 is -- it's not part of my job duties. I'm testifying 18 to my job disputes.</p> <p>19 Q. Are you testifying today in your capacity as 20 an employee of the IBWC?</p> <p>21 A. I'm employed by the IBWC, U.S. Section, yes.</p> <p>22 Q. But are you testifying in your capacity as 23 an employee of the IBWC?</p> <p>24 A. My understanding is yes.</p> <p>25 Q. Okay. Do you have any reason to believe</p> | <p>224</p> <p>1 look like. The treaty itself just says an agreement 2 of the Commission approved by the two governments.</p> <p>3 Q. Can you say under oath that any such 4 consents or approvals are reasonably likely to occur 5 at any future date?</p> <p>6 MR. HARRISON: Objection. Form.</p> <p>7 A. I couldn't speculate on the future.</p> <p>8 Q. (BY MR. STONE) Would it require the consent 9 of the U.S. Army Corps of Engineers?</p> <p>10 A. Within the scope of the treaty, it says the 11 approval of the two governments. Whether or not the 12 approval for the U.S. Government would be subject to 13 what you just said, the -- that's a domestic process 14 that's not part of my job duties or knowledge.</p> <p>15 Q. Would it require -- if you know, would it 16 require the consent of the United States Congress?</p> <p>17 A. Typically the -- any minutes or agreements 18 are going to be consulted through Congress as part of 19 our operation.</p> <p>20 Q. Would it require the consent or approval of 21 Texas or any agency of Texas, such as the TCEQ?</p> <p>22 A. To the extent of modification of domestic 23 law, if that's required, or changes in authority for 24 the commission itself, I -- it's not part of my 25 duties at the Commission to make those</p> |
| <p>223</p> <p>1 that the level of Mexican cartel activity and illegal 2 activity on or near the Rio Grande between Amistad 3 Dam and the city of Laredo will substantially be 4 reduced anytime in the foreseeable future?</p> <p>5 MR. HARRISON: Objection. Form.</p> <p>6 A. I can't speculate on the future.</p> <p>7 Q. (BY MR. STONE) How much -- would any 8 changes in the amount of water released from the 9 Amistad Dam for the purposes of facilitating 10 navigation require the consent or approval of the 11 United States and of Mexico?</p> <p>12 A. Can you please restate the question, just so 13 -- not restate, but say it again so I can follow it?</p> <p>14 Q. Uh-huh. Would any change in the amount of 15 water released from Amistad Dam for the purpose of 16 facilitating navigation require the consent or 17 approval of the United States and Mexico?</p> <p>18 A. It is suggested by the -- or the treaty does 19 say that there may be -- have to be a modification to 20 the general operating rules that -- approval of the 21 two governments.</p> <p>22 Q. So it would require the approval of 23 amendments to the treaties or minutes between the 24 United States and Mexico?</p> <p>25 A. I can't say specifically what that would</p> | <p>225</p> <p>1 determinations.</p> <p>2 Q. Would it require the approval or consent of 3 the TCEQ watermaster?</p> <p>4 A. Would what require modif -- approval or 5 consent of the TCEQ watermaster?</p> <p>6 Q. Any changes in the amount of water released 7 from Amistad Dam for the purposes of facilitating 8 navigation.</p> <p>9 A. So any change in the sense that -- for the 10 U.S. portion of the water that is owned by Texas, it 11 is at the request of the Texas watermaster. Now, 12 whether or not Texas law or Texas Administrative Code 13 is -- does what you're proposing, that's a domestic 14 matter.</p> <p>15 Q. Can you -- can you say under oath that any 16 such consent or approvals are reasonably alike -- 17 reasonably likely to occur at any future date?</p> <p>18 MR. HARRISON: Objection. Form.</p> <p>19 A. I wouldn't be able to give a -- predict the 20 future.</p> <p>21 Q. (BY MR. STONE) Are you aware of cartels 22 attempting to weaponize commercial supply chains 23 crossing the US/Mexico border for their economic 24 benefit and to undermine U.S. national security?</p> <p>25 MR. HARRISON: Objection. Form.</p> |

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| <p style="text-align: right;">226</p> <p>1 A. Again, that's not part of my -- I couldn't 2 provide an answer to that.</p> <p>3 Q. (BY MR. STONE) Okay. I'm going back to 4 what is marked as Cortez Exhibit 2. We're finished 5 with those questions; we're going to switch to a 6 different set.</p> <p>7 A. Okay. Still on this document, but a 8 different set of questions?</p> <p>9 Q. Yeah, yeah. Now we're going to go -- yeah, 10 we're going to talk about some -- a different set of 11 questions now. But we're going to be referring, I 12 think, in this next set of questions to your expert 13 report.</p> <p>14 A. Okay.</p> <p>15 Q. Let's go to page 10 of your report. I'm 16 sorry, page 12. I want to ask about the third dam 17 that's authorized.</p> <p>18 So you mentioned that there is a -- so 19 when this 1944 treaty was approved, right, it 20 authorized the construction of three dams, and two of 21 them were built, right?</p> <p>22 A. That is correct, yes.</p> <p>23 Q. And the two dams that were built were the 24 Amistad Dam and the Falcon Dam, right?</p> <p>25 A. That is accurate, yes.</p> | <p style="text-align: right;">228</p> <p>1 dams?</p> <p>2 A. What are you referring to, a page or just in 3 general?</p> <p>4 Q. Let's start with Amistad Dam.</p> <p>5 A. Okay. So at present, Amistad Dam has lost 6 silt over time. But at present there's about 32,000 7 acre-feet of remaining silt storage for that dam, 8 32,700.</p> <p>9 Q. Is it even feasible to release enough water 10 for navigation, accounting for the height of silt, 11 depth of water at the release points?</p> <p>12 MR. HARRISON: Objection. Form.</p> <p>13 A. Sorry, earlier you were talking about the 14 silt at Amistad Dam.</p> <p>15 Q. (BY MR. STONE) Uh-Huh.</p> <p>16 A. Now you're talking about -- when you say 17 "release points," what are you talking about?</p> <p>18 Q. So when I say the term -- are you familiar 19 with the term "release points"?</p> <p>20 A. I haven't used it before, so.</p> <p>21 Q. Okay. All right. That clarifies that, 22 right?</p> <p>23 How silted in is the Maverick Dam?</p> <p>24 A. I have not performed any sort -- I don't 25 have any knowledge of how silted in it is.</p> |
| <p style="text-align: right;">227</p> <p>1 Q. But it approved the construction of a third 2 dam, right?</p> <p>3 A. It didn't approve the construction of the 4 dam, but it did authorize that under the treaty.</p> <p>5 Q. I see. Where would that third dam be 6 located?</p> <p>7 A. The treaty does suggest that it would be 8 located near Laredo, but it does offer, you know, 9 based on engineering expertise at the time and 10 review, that that may be subject to change.</p> <p>11 Q. Do you know if there's been an actual plan 12 produced for the construction of that third dam?</p> <p>13 A. Not to my knowledge specifically.</p> <p>14 Q. Do you know if it's currently been 15 contemplated to construct the third dam?</p> <p>16 MR. HARRISON: Objection. Form.</p> <p>17 A. Again, I'm not -- in my personal knowledge, 18 I'm not aware.</p> <p>19 Q. (BY MR. STONE) Would it change your 20 opinions in this case if the -- if the third dam was 21 constructed in the segment of the Rio Grande River 22 near Laredo?</p> <p>23 A. I don't believe so, just to the extent that 24 it would be functionally similar to Falcon.</p> <p>25 Q. In footnotes -- okay. How silted in are the</p> | <p style="text-align: right;">229</p> <p>1 Q. How silted in is the Falcon Dam?</p> <p>2 A. As of our last survey, it is -- it doesn't 3 have any more remaining silt capacity except for 10 4 or 13 acre-feet -- 10 acre-feet.</p> <p>5 Q. Are the penstocks at Amistad Dam that are 6 not operational not operative due to siltation?</p> <p>7 A. I -- not to my knowledge; it is not due to 8 siltation. Sorry, let me make sure I said that 9 correctly.</p> <p>10 To my knowledge, it is not due to 11 siltation. I think I had a double negative.</p> <p>12 Q. Uh-huh. What is the most recent 13 topobathymetric survey that has been conducted on 14 this segment of the Rio Grande River?</p> <p>15 A. The most recent? I don't know what the most 16 recent is.</p> <p>17 Q. Did you review any topobathymetric surveys 18 in preparation for your expert testimony in this 19 case?</p> <p>20 A. I only reviewed what is referenced in 21 Section -- and I did not review the actual survey but 22 just the results from that survey for the creation of 23 Figures 12 and 13 in Section 8.4, as those are the 24 result of a topographic survey.</p> <p>25 Q. When are -- so when you say on page -- can</p> |

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| <p style="text-align: right;">230</p> <p>1 you define "dead storage" in a reservoir?</p> <p>2 A. I'm sorry, so the first thing you said, "on</p> <p>3 page," and then "can you" --</p> <p>4 Q. Yeah, sorry. Strike that.</p> <p>5 What is dead storage on a reservoir?</p> <p>6 A. Okay. So dead storage would refer to the</p> <p>7 water that is behind the dam that we cannot evacuate</p> <p>8 by means of gravity through the penstocks.</p> <p>9 Q. How much dead storage is there in the</p> <p>10 Amistad Reservoir?</p> <p>11 A. 32,700 acre-feet as of the last survey that</p> <p>12 was conducted. You said Amistad, correct?</p> <p>13 Q. Yes.</p> <p>14 A. Yes.</p> <p>15 Q. My next question is on page 30 here, where</p> <p>16 I've highlighted the word "most."</p> <p>17 A. Okay. "Most."</p> <p>18 Q. Yes. So "Most of the flow from Maverick</p> <p>19 Canal reenters the Rio Grande about ten miles</p> <p>20 upstream of the city limits of Eagle Pass, Texas,</p> <p>21 after being conveyed through the canal and discharged</p> <p>22 or spilled from Maverick Power Plant." Did I read</p> <p>23 that correctly?</p> <p>24 A. I believe so, yes.</p> <p>25 Q. How much is most?</p> | <p style="text-align: right;">232</p> <p>1 2010. There was -- I believe there was a period in</p> <p>2 2008. I would have to go even farther back to start</p> <p>3 getting all the different floods that filled the</p> <p>4 reservoir.</p> <p>5 Q. I think I'm winding down here.</p> <p>6 How would raising the water levels in</p> <p>7 the Rio Grande River affect the inundation impact if</p> <p>8 another hurricane like Alex occurs?</p> <p>9 A. Okay. Say the question again, please.</p> <p>10 Q. Uh-huh. How would raising the water depth</p> <p>11 level of the Rio Grande River affect the inundation</p> <p>12 impact if another hurricane like Alex occurs?</p> <p>13 A. We would operate Amistad Reservoir in</p> <p>14 accordance with our criteria. So that dictates the</p> <p>15 release rates that we would use.</p> <p>16 If the hurricane were to occur</p> <p>17 downstream of Amistad and the tributaries from those</p> <p>18 were contributing, of course then we would not be</p> <p>19 able to regulate the flood out of Amistad in the</p> <p>20 sense that anytime you have water in the river, it's</p> <p>21 going to have some sort of impact, but it is</p> <p>22 something that we would account for according to our</p> <p>23 operational guidelines.</p> <p>24 Q. You mention the survey boats that are used</p> <p>25 by IBWC. But isn't it true that IBWC could also use</p> |
| <p style="text-align: right;">231</p> <p>1 A. Most? They will divert as much as they can</p> <p>2 within the capacity limits of the Maverick Canal. So</p> <p>3 if the water is available, they will divert it, and</p> <p>4 then also if they have the ability to do that with</p> <p>5 the watermaster. So most could be, as I show there</p> <p>6 in this figure, one thousand -- your average is about</p> <p>7 a thousand CFS across the year in my median value.</p> <p>8 During the winter the Rio Grande is only</p> <p>9 at 400 CFS. So from that proportion is where I'm</p> <p>10 saying "most," as opposed to later when there is</p> <p>11 additional flows, it looks to be closer to being</p> <p>12 equal.</p> <p>13 Q. All right.</p> <p>14 A. It's seasonally dependent.</p> <p>15 Q. All right. Next I want to ask about this</p> <p>16 statement in the first sentence on page 31, "when</p> <p>17 water levels in the Amistad Dam exceed the assigned</p> <p>18 total conservation pool capacity." Do you see that?</p> <p>19 A. I do.</p> <p>20 Q. How often do the water levels at the Amistad</p> <p>21 Dam exceed the assigned total conservation pool</p> <p>22 capacity?</p> <p>23 A. You're talking historically?</p> <p>24 Q. Uh-huh.</p> <p>25 A. And just -- so the most recent time was in</p> | <p style="text-align: right;">233</p> <p>1 other means to conduct surveys, like gages,</p> <p>2 satellites, drones, or planes?</p> <p>3 A. Define what you mean by "survey" in this</p> <p>4 instance.</p> <p>5 Q. I mean, the surveys as you refer to it being</p> <p>6 conducted by the boats on page 35 of your report.</p> <p>7 A. I refer to our collection of data as well as</p> <p>8 surveys. So you're just talking about surveys as it</p> <p>9 relates to...</p> <p>10 Q. I'm talking about the surveys that you're</p> <p>11 discussing on page 35 of your report.</p> <p>12 Let me ask this a little differently.</p> <p>13 Could the surveys -- let me give you a minute to get</p> <p>14 there. Are you on page 35 of your report?</p> <p>15 A. Yes, I am.</p> <p>16 Q. Okay. Could the surveys described on this</p> <p>17 page that are being conducted by the boats similarly</p> <p>18 be conducted by other means such as drone or airplane</p> <p>19 or some other means?</p> <p>20 A. I am interpreting -- well, I used "survey"</p> <p>21 here, so I'll explain what I was using.</p> <p>22 So survey would be the collection of</p> <p>23 topobathymetry. There are -- satellites have a hard</p> <p>24 time penetrating water. Similarly with LiDAR. There</p> <p>25 are specific wavelengths that have been used to</p> |

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| <p style="text-align: right;">234</p> <p>1 penetrate water. And that depends on the depth of</p> <p>2 the water also. That's a factor that you have to</p> <p>3 take into account.</p> <p>4 So it's possible that the things that</p> <p>5 you outlined may have difficulties depending on what</p> <p>6 the goal of your survey is. If it's just an aerial</p> <p>7 survey --</p> <p>8 Q. Uh-huh.</p> <p>9 A. -- and you're not talking about the portion</p> <p>10 of the river that's under-inundated at that time,</p> <p>11 then you could use a boat -- or not a boat but a</p> <p>12 drone, I believe you said, or a satellite.</p> <p>13 I'm sure the technology for satellites</p> <p>14 has improved, but generally, I don't think it's used</p> <p>15 for an engineering-level survey, if that's what your</p> <p>16 requirement is.</p> <p>17 Q. Okay. Next I want to ask about these</p> <p>18 specific boats. The first one on page 35 of your</p> <p>19 report is the 16-foot single-motor johnboat. Do you</p> <p>20 see it?</p> <p>21 A. I do.</p> <p>22 Q. Do you know that -- what the draft is for</p> <p>23 that boat?</p> <p>24 A. I'm not familiar with that.</p> <p>25 Q. Next is the 26-foot landing craft boat. Do</p> | <p style="text-align: right;">236</p> <p>1 up?</p> <p>2 MR. STONE: Which one is it?</p> <p>3 MR. HARRISON: Exhibit 3.</p> <p>4 MR. STONE: Okay.</p> <p>5 Q. (BY MR. HARRISON) Did you draft any</p> <p>6 portions of this letter of Exhibit 3?</p> <p>7 A. I was asked to give a couple of sentences on</p> <p>8 what I expected to be within my report, and I believe</p> <p>9 that was used as input for creation of this document.</p> <p>10 But if it's verbatim, what I issued, I cannot recall.</p> <p>11 Q. But prior to today had you seen that letter</p> <p>12 before?</p> <p>13 A. Not to my knowledge.</p> <p>14 Q. Do you recall also being asked this morning</p> <p>15 about Exhibit 4, a May 3rd, 2024 letter?</p> <p>16 A. Can I see Exhibit 4, just to make sure I'm</p> <p>17 referring to the right document?</p> <p>18 MR. STONE: Yeah, absolutely.</p> <p>19 Q. (BY MR. HARRISON) So prior to today had you</p> <p>20 seen Exhibit 4 before?</p> <p>21 A. I had not, no.</p> <p>22 Q. And all of your report and opinions are</p> <p>23 contained within Exhibit 2?</p> <p>24 A. Exhibit 2 as I understand it to be the</p> <p>25 expert report that I'm currently holding in my hand.</p> |
| <p style="text-align: right;">235</p> <p>1 you see it in your report?</p> <p>2 A. I see it.</p> <p>3 Q. Do you know what the draft is for that boat?</p> <p>4 A. I'm not familiar with that information.</p> <p>5 Q. Next you talk about the 28-foot landing</p> <p>6 craft boat. Do you see that on the report?</p> <p>7 A. I do see that information.</p> <p>8 Q. Do you know what the draft is for that boat?</p> <p>9 A. I do not know that information.</p> <p>10 Q. Do you know what the draft is for any of the</p> <p>11 boats discussed on page 35 of your expert report?</p> <p>12 A. I do not.</p> <p>13 Q. Okay.</p> <p>14 MR. STONE: Pass the witness.</p> <p>15 MR. HARRISON: Can we take -- actually,</p> <p>16 I'll go ahead. Just a few questions.</p> <p>17 EXAMINATION</p> <p>18 BY MR. HARRISON:</p> <p>19 Q. Mr. Cortez, do you recall being asked this</p> <p>20 morning about Exhibit 3, which was a January 24th,</p> <p>21 2024 letter?</p> <p>22 A. Could I see the exhibit for my -- make sure</p> <p>23 we're talking about the --</p> <p>24 Q. Sure.</p> <p>25 MR. HARRISON: Do you mind pulling that</p> | <p style="text-align: right;">237</p> <p>1 Q. Do you recall being asked this afternoon</p> <p>2 about various hypotheticals regarding water releases</p> <p>3 from Amistad Dam and the effect of the water flows</p> <p>4 and levels downstream of Amistad?</p> <p>5 A. I do recall, yes.</p> <p>6 Q. You did not consider those as part of --</p> <p>7 for -- as part of your report, did you?</p> <p>8 MR. STONE: Objection. Leading.</p> <p>9 A. I did not consider hypothetical situations</p> <p>10 in my report.</p> <p>11 Q. (BY MR. HARRISON) And would you need more</p> <p>12 information and data in order to fully respond to</p> <p>13 those hypotheticals?</p> <p>14 MR. STONE: Objection. Leading.</p> <p>15 A. That is accurate.</p> <p>16 MR. HARRISON: I don't have anything</p> <p>17 else.</p> <p>18 FURTHER EXAMINATION</p> <p>19 BY MR. STONE:</p> <p>20 Q. So following up, did you -- is your</p> <p>21 testimony that you wrote this sentence that I'm</p> <p>22 highlighting here on Cortez Exhibit 4?</p> <p>23 A. As I stated, I supplied a few sentences</p> <p>24 related to what was going to be in my report. I</p> <p>25 could not tell you if that is a verbatim recollection</p> |

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| <p style="text-align: right;">238</p> <p>1 of what I provided. It was just a -- yeah.</p> <p>2 Q. Do you think that your report, which we've</p> <p>3 marked as Cortez Exhibit 2, is inconsistent in any</p> <p>4 way with this description of what you're -- the</p> <p>5 subjects of your expert testimony contained in Cortez</p> <p>6 Exhibit 4?</p> <p>7 MR. HARRISON: Objection. Form.</p> <p>8 A. I'm rereading the sentence. Give me a</p> <p>9 moment.</p> <p>10 I believe it does state what's generally</p> <p>11 in my report as a short summary.</p> <p>12 Q. (BY MR. STONE) So you don't see any</p> <p>13 inconsistencies, right?</p> <p>14 MR. HARRISON: Objection. Form.</p> <p>15 A. Again, no, I -- it generally describes this</p> <p>16 section of my reports -- report.</p> <p>17 Q. (BY MR. STONE) You were also asked a minute</p> <p>18 ago about whether or not you considered hypotheticals</p> <p>19 for the purposes of your expert report. Do you</p> <p>20 recall that?</p> <p>21 A. I do.</p> <p>22 Q. Would you consider creating a model to</p> <p>23 determine how much water you would release to raise</p> <p>24 the depth of the Rio Grande River at different</p> <p>25 sections to be hypothetical?</p> | <p style="text-align: right;">240</p> <p>1 We'll read and sign.</p> <p>2 MR. STONE: Thank you. She's muted.</p> <p>3 Sorry, Vanessa.</p> <p>4 THE REPORTER: There we go. I think</p> <p>5 that's all I can think of that I need. Leo, do you</p> <p>6 need anything?</p> <p>7 THE VIDEOGRAPHER: No, ma'am.</p> <p>8 THE REPORTER: All right.</p> <p>9 THE VIDEOGRAPHER: This concludes the</p> <p>10 deposition. The time is 4:39 p.m., going off the</p> <p>11 record.</p> <p>12 (Discussion off the record.)</p> <p>13 MR. STONE: We want an ex -- do you want</p> <p>14 me to go through the whole thing of what we want?</p> <p>15 THE REPORTER: Yes.</p> <p>16 MR. STONE: I want a copy -- an</p> <p>17 electronic copy of the transcript expedited. We</p> <p>18 would like a rough draft if possible. I think that's</p> <p>19 it. Am I missing anything, Vanessa?</p> <p>20 THE REPORTER: I don't think so.</p> <p>21 MR. STONE: All right. Perfect.</p> <p>22 THE REPORTER: So I'm just going to get</p> <p>23 your final on May 31st. Do you still want a</p> <p>24 rough?</p> <p>25 MR. STONE: What's today's date, the</p> |
| <p style="text-align: right;">239</p> <p>1 MR. HARRISON: Objection. Form.</p> <p>2 A. I guess could you expand on that question or</p> <p>3 restate it? I'm not --</p> <p>4 Q. (BY MR. STONE) Yeah.</p> <p>5 A. -- what -- the existence of something</p> <p>6 wouldn't be hypothetical, so...</p> <p>7 Q. If you create -- is modeling a hypothetical?</p> <p>8 A. It is an estimate. It's not 100 percent</p> <p>9 accurate. There's going to be uncertainties in any</p> <p>10 model.</p> <p>11 Q. So if you created modeling in this case to</p> <p>12 determine how much water would be needed to raise the</p> <p>13 depth of the Rio Grande River to whatever height, say</p> <p>14 three feet, throughout the entire Rio Grande River,</p> <p>15 if you were to model that, would that just be a</p> <p>16 hypothetical?</p> <p>17 A. I don't believe so. It would be based off</p> <p>18 of some sort of science and engineering judgment.</p> <p>19 Q. Based on the data that you collect to put</p> <p>20 into the model to run the model and determine what</p> <p>21 you would need, right?</p> <p>22 A. That is correct.</p> <p>23 Q. Okay.</p> <p>24 MR. STONE: Pass the witness.</p> <p>25 MR. HARRISON: Nothing. That's all.</p> | <p style="text-align: right;">241</p> <p>1 22nd? So -- you know what, no, no need for the</p> <p>2 rough.</p> <p>3 THE REPORTER: Okay.</p> <p>4 MR. STONE: You can do it on the 31st.</p> <p>5 That would work awesome.</p> <p>6 MR. HARRISON: Same for us too.</p> <p>7 THE REPORTER: Sounds good.</p> <p>8 (Deposition concluded at 4:40 p.m.)</p> <p>9</p> <p>10 -- SIGNATURE REQUIRED --</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19 * * * * *</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> |

| <div style="text-align: right;">242</div> <p>1 CHANGES AND SIGNATURE</p> <p>2 WITNESS NAME: ADRIAN CORTEZ</p> <p>3 DATE OF DEPOSITION: MAY 22, 2024</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">4 PAGE</th> <th style="width: 10%;">LINE</th> <th style="width: 30%;">CHANGE</th> <th style="width: 50%;">REASON</th> </tr> <tr><td>5</td><td></td><td></td><td></td></tr> <tr><td>6</td><td></td><td></td><td></td></tr> <tr><td>7</td><td></td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td><td></td></tr> <tr><td>9</td><td></td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td><td></td></tr> <tr><td>11</td><td></td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td><td></td></tr> <tr><td>13</td><td></td><td></td><td></td></tr> <tr><td>14</td><td></td><td></td><td></td></tr> <tr><td>15</td><td></td><td></td><td></td></tr> <tr><td>16</td><td></td><td></td><td></td></tr> <tr><td>17</td><td></td><td></td><td></td></tr> <tr><td>18</td><td></td><td></td><td></td></tr> <tr><td>19</td><td></td><td></td><td></td></tr> <tr><td>20</td><td></td><td></td><td></td></tr> <tr><td>21</td><td></td><td></td><td></td></tr> <tr><td>22</td><td></td><td></td><td></td></tr> <tr><td>23</td><td></td><td></td><td></td></tr> <tr><td>24</td><td></td><td></td><td></td></tr> <tr><td>25</td><td></td><td></td><td></td></tr> </table> | 4 PAGE | LINE | CHANGE | REASON | 5 | | | | 6 | | | | 7 | | | | 8 | | | | 9 | | | | 10 | | | | 11 | | | | 12 | | | | 13 | | | | 14 | | | | 15 | | | | 16 | | | | 17 | | | | 18 | | | | 19 | | | | 20 | | | | 21 | | | | 22 | | | | 23 | | | | 24 | | | | 25 | | | | <div style="text-align: right;">244</div> <p>1 IN THE UNITED STATES DISTRICT COURT</p> <p>2 FOR THE WESTERN DISTRICT OF TEXAS</p> <p>3 AUSTIN DIVISION</p> <p>4 UNITED STATES OF AMERICA,)</p> <p>5)</p> <p>6 Plaintiff,)</p> <p>7)</p> <p>8 VS.) CIVIL ACTION</p> <p>9)</p> <p>10 GREG ABBOTT IN HIS) NO.: 1:23-cv-00853-DAE</p> <p>11 CAPACITY AS GOVERNOR OF)</p> <p>12 THE STATE OF TEXAS, AND)</p> <p>13 THE STATE OF TEXAS,)</p> <p>14)</p> <p>15 Defendants.)</p> <p>16</p> <p>17 REPORTER'S CERTIFICATION OF THE ORAL</p> <p>18 DEPOSITION OF ADRIAN CORTEZ</p> <p>19 MAY 22, 2024</p> <p>20</p> <p>21 I, Vanessa J. Theisen, a Certified Shorthand</p> <p>22 Reporter in and for the State of Texas, hereby</p> <p>23 certify to the following:</p> <p>24 That the witness, ADRIAN CORTEZ, was duly</p> <p>25 sworn by the officer and that the transcript of the</p> <p>oral deposition is a true record of the testimony</p> <p>given by the witness;</p> <p>That the original deposition was delivered</p> <p>Mr. Brian Harrison to obtain witness's signature.</p> <p>That a copy of this certificate was served</p> <p>on all parties and/or the witness shown herein on</p> <p>May 30, 2024.</p> <p>I further certify that pursuant to FRCP</p> <p>Rule 30(3) that the signature of the deponent:</p> |
|--|--|--------|--------|--------|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|--|--|
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| <div style="text-align: right;">243</div> <p>1 I, ADRIAN CORTEZ, have read the foregoing</p> <p>2 deposition and hereby affix my signature that same is</p> <p>3 true and correct, except as noted above.</p> <p>4</p> <p>5 _____</p> <p style="text-align: center;">ADRIAN CORTEZ</p> <p>6</p> <p>7 THE STATE OF _____)</p> <p>8 COUNTY OF _____)</p> <p>9 Before me, _____, on this day</p> <p>10 personally appeared ADRIAN CORTEZ, known to me (or</p> <p>11 proved to me under oath or through _____)</p> <p>12 (description of identity card or other document) to</p> <p>13 be the person whose name is subscribed to the</p> <p>14 foregoing instrument and acknowledged to me that he</p> <p>15 executed the same for the purposes and consideration</p> <p>16 therein expressed.</p> <p>17 Given under my hand and seal of office, this</p> <p>18 _____ day of _____, _____.</p> <p>19</p> <p>20</p> <p>21 _____</p> <p style="text-align: center;">NOTARY PUBLIC IN AND FOR</p> <p>22</p> <p>23 THE STATE OF _____</p> <p>24 My commission expires: _____</p> <p>25 _____ No Changes Made _____ Amendment Sheet(s) Attached</p> | <div style="text-align: right;">245</div> <p>1 _XX_ was requested by the deponent or a</p> <p>2 party before the completion of the deposition and</p> <p>3 that the signature is to be before any notary public</p> <p>4 and returned within 30 days from date of receipt of</p> <p>5 the transcript.</p> <p>6 If returned, the attached Changes and</p> <p>7 Signature Page contains any changes and the reasons</p> <p>8 therefore:</p> <p>9 _____ was not requested by the deponent or</p> <p>10 a party before the completion of the deposition.</p> <p>11 I further certify that I am neither</p> <p>12 counsel for, related to, nor employed by any of the</p> <p>13 parties or attorneys in the action in which this</p> <p>14 proceeding was taken, and further that I am not</p> <p>15 financially or otherwise interested in the outcome of</p> <p>16 the action.</p> <p>17 Certified to by me on this, the 30 day</p> <p>18 of May, 2024.</p> <p>19</p> <p>20</p> <p>21 _____</p> <p style="text-align: center;">VANESSA J. THEISEN, Texas CSR, RPR</p> <p style="text-align: center;">Texas Cert No. 3238</p> <p style="text-align: center;">Expiration Date: 10/31/25</p> <p style="text-align: center;">Integrity Legal Support Solutions</p> <p style="text-align: center;">Firm Registration No. 528</p> <p style="text-align: center;">9901 Brodie Ln., Ste. 160-400</p> <p style="text-align: center;">Austin, Texas 78748</p> <p style="text-align: center;">(512) 320-8690</p> <p style="text-align: center;">www.integritylegal.support</p> <p>25</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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